

**OFFICE OF TECHNICAL SERVICES**

**OSRD REPORTS**

**BIBLIOGRAPHY AND INDEX OF DECLASSIFIED  
REPORTS HAVING OSRD NUMBERS**

Edited by  
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**Bibliographic and Reference Division**

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## INTRODUCTION

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This publication includes all of the Office of Scientific Research and Development reports which have had OSRD numbers assigned to them and which have been forwarded to the Office of Technical Services. It does not include any report having a military security classification, nor does it include reports prepared under OSRD sponsorship which have not had OSRD numbers assigned to them. It was not feasible to include the unnumbered reports due to bibliographic problems which would have delayed publication by several months. If it is possible to prepare a similar list for the unnumbered series at a later date, an effort will be made to do so.

For convenience, the publication is arranged in three parts:

**Part I** A bibliography arranged by OSRD number with the correlated PB numbers. Immediately following the PB number is the volume and page reference in the "Bibliography of Scientific and Industrial Reports"<sup>\*</sup> where an abstract of the report may be found.

**Part II** A cross reference list arranged in PB number order and giving the corresponding OSRD number.

**Part III** An author and subject index to the OSRD reports listed in Part I. The entries refer to OSRD numbers.

All of the reports are available from OTS in photostat or microfilm copies at the prices indicated. OTS has no printed copies available for sale. The reports should be ordered from OTS by PB numbers, and the order should be accompanied by a check or money order made payable to the Treasurer of the United States.

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<sup>\*</sup>The "Bibliography of Scientific and Industrial Reports" is a weekly publication prepared by OTS containing abstracts of 1,500 scientific and technical reports. Subscriptions at \$10 per year may be placed with the Superintendent of Documents, Washington, D. C.

# BIBLIOGRAPHY

- OSRD 2 PBL 27290 (2-86) Progress report to services, #5c Section D-2, Fire control. Jan 1941.  
Karman, Theodore von  
Supersonic windtunnel project. Progress reports 1 and 2. Jan, Jun 1941.  
7p MI \$1.00 Ph \$1.00.
- OSRD 7 PBL 40550 (3-429) OSRD 45 PBL 8306 (I-603)  
Burchard, John Conant, J. B., and Chadwell, Harris M.  
Structural protection studies to Mar 15, Small portable plants for the production of liquid oxygen. 1941.  
1941. Progress report No. A-3. Mar 1941.  
22p MI \$1.00 Ph \$2.00.  
74p MI \$1.00 Ph \$5.00.
- OSRD 10 PBL 23677 (2-301) OSRD 49 PBL 39714 (3-424)  
Smyth, H. D. U. S. National Defense Research Committee  
Construction of the NDRC experimental firing range at Princeton University. Progress report. Jun 1941.  
29p drawings, photos. MI \$.50 Ph \$2.00.  
Reduction of range and height finder errors due to temperature stratification. Progress report. Aug 1941.  
9p MI \$1.00 Ph \$1.00.
- OSRD 13 PBL 15892 (I-968) OSRD 52 PBL 34130 (3-44)  
Karman, Theodore von U. S. National Defense Research Committee  
Proposal and tentative plan for a super-speed wind tunnel; Preliminary report; with an Appendix containing a Report by the National Academy of Sciences. Jul 1941.  
47p drawings. MI \$.50 Ph \$4.00.  
Progress report to services, #15: Sect. D-2, Fire Control. Oct 1941.  
26p MI \$1.00 Ph \$2.00.
- OSRD 14 PBL 33190 (3-283) OSRD 55 PBL 32599 (2-812)  
Karman, Theodore von Dunham, Theodore, Jr.  
Superspeed wind tunnel. Progress report. Sep 1941.  
11p diagrs. MI \$1.00 Ph \$1.00.  
Report on production of roof prisms for the Army and Navy. The influence of optical glass quality and of methods of grinding, polishing and testing on the rate of production. Apr 1941.  
13p MI \$1.00 Ph \$1.00.
- OSRD 17 PBL 27275 (2-581) OSRD 60 PBL 8307 (I-801)  
Schrodt, John P., and others Adams, Roger, and Chadwell, Harris M.  
Development of the perchloric acid battery with high flash currents at low temperatures. Progress report. Aug 1941.  
61p graphs, photos. MI \$2.00 Ph \$5.00.  
Report on "Engine tests with chemical sources of oxygen." 1941.  
56p MI \$1.00 Ph \$4.00.
- OSRD 19 PBL 33189 (2-819) OSRD 61 PBL 28532 (2-214)  
Robertson, H. P. Molnar, Julius P., and Harrison, G. R.  
The mechanics of armor perforation: I. Residual velocity. Summary report. Jul 1941.  
36p graphs, tables. MI \$1.00 Ph \$3.00.  
Report on present status of optical plastics. Nov 1941.  
79p graphs, tables. MI \$2.00 Ph \$6.00.
- OSRD 20 PBL 27422 (2-354) OSRD 62 PBL 39573 (3-400)  
Burchard, John Evans, Robley D., and others  
Structural protection studies to Jun 30, 1941. Progress report. Aug 1941.  
5p MI \$1.00 Ph \$1.00.  
Development of an instrument capable of measuring the radon content of breath and room air samples. Nov 1941.  
5p MI \$1.00 Ph \$1.00.
- OSRD 31 PBL 39574 (3-502) OSRD 64 PBL 32718 (3-125)  
Beranek, Leo L., and others Bridgman, P. W.  
Materials and techniques for sound control in airplanes. Excerpts from progress report of project I. Mar 1941.  
153p photos, tables, drawings, graphs, diagrs. MI \$3.00 Ph \$10.00.  
Effect of mechanical stresses on high explosives. Progress report. Dec 1940.  
3p MI \$1.00 Ph \$1.00.
- OSRD 34 PBL 8333 (I-621) OSRD 69 PBL 19784 (I-1510)  
Stevens, S. S. Kistlakowsky, G. B., and Wilson, E. B., Jr.  
The effects of noise and vibration on psychomotor efficiency. 1941.  
18p MI \$.50 Ph \$2.00.  
Report on the prediction of detonation velocities of solid explosives. Jan 1941.  
50p tables. MI \$.50 Ph \$4.00.
- OSRD 39 PBL 39580 (3-471) OSRD 70 PBL 27313 (2-817)  
Brown, Gordon S. Kistlakowsky, G. B., and Wilson, E. B., Jr.  
Behavior and design of servomechanisms. Nov 1940.  
48p charts, tables, diagrs. MI \$1.00 Ph \$4.00.  
Hydrodynamic theory of detonation waves: Part III. Properties of shock waves. Progress report. Jan 1941.  
27p MI \$1.00 Ph \$2.00.
- OSRD 42 PBL 34135 (2-825) OSRD 71 PBL 31203 (2-554)  
U. S. National Defense Research Committee Richter, George A.  
Wood cellulose nitrates for munitions. Final report, part I, Nov 1940. Jan 1941.  
251p graphs, photos, tables. MI \$8.00 Ph \$17.00.
- OSRD 72 PBL 31205 (2-744)  
Richter, George A.  
Conversion of nitrocellulose to smokeless powder. Final report, part II, Dec 1940. Jan 1941.  
97p graphs. MI \$2.00 Ph \$7.00.
- OSRD 75 PBL 8322 (I-603)  
Conant, J. B., and others  
Report on suggested method of producing oxygen on aircraft in flight. 1941.  
2p MI \$.50 Ph \$1.00.
- OSRD 79 PBA 32716 (3-241)  
Adams, Roger, and Marvel, C. S.  
Several organic compounds that may have value as lacrimators and/or as vesicants. Progress report. Mar 1941.  
4p MI \$1.00 Ph \$1.00.
- OSRD 87 PBL 8323 (I-571)  
Conant, J. B.  
Report on engine tests with chemical sources of oxygen. 1941.  
30p MI \$.50 Ph \$2.00.
- OSRD 95 PBL 9401 (I-802)  
Sheweny, W. J.  
Report on "Engine tests with chemical sources of oxygen." May 1941.  
22p graphs. MI \$.50 Ph \$2.00.
- OSRD 98 PBL 50821 (I-487)  
Pauling, Linus  
A light-weight instrument for indicating the partial pressure of oxygen in cases. Final report, May 13, 1941. Jun 1941.  
13p photos. MI \$1.00 Ph \$1.00.
- OSRD 101 PBL 5561 (I-529)  
Rodebush, W. H.  
Report on filter materials. 1941.  
3p MI \$.50 Ph \$1.00.
- OSRD 105 PBA 5598 (I-475)  
Adams, Roger, and Marvel, C. S.  
Report on "Possible pro-knock compounds." 1941.  
23p MI \$.50 Ph \$2.00.
- OSRD 106 PBL 23207 (2-72)  
Busewell, A. H.  
Removal of salts from sea water (ML-85). Final report, Jun 15, 1941. Jun 1941.  
59p tables. MI \$1.00 Ph \$4.00.
- OSRD 108 PBA 5600 (I-475)  
Adams, Roger  
Preparation of certain organic arsenicals. 1941.  
32p illus. MI \$.50 Ph \$3.00.
- OSRD 111 PBA 50817 (5-417)  
Leighton, Philip A.  
The removal of ethylene imine. Progress report, Jun 27, 1941. Jun 1941.  
8p graphs, table. MI \$1.00 Ph \$1.00.

## Bibliography

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- OSRD 173 PBL 11143 (I-371)  
Flesser, Louis F.  
Comparative tests of various incendiary mixtures. Part II. Comparison of magnesium, thermite, SDO-sodium nitrate and a gum incendiary. 1941.  
11p Ph \$1.00 MI \$.50.
- OSRD 174 PBL 4366 (I-371)  
Flesser, L. F.  
Report on "Production of Incendiaries from Acetylene" Polymers (DVA and SDO) to September 15, 1941. 1941.  
24p MI \$.50 Ph \$2.00.
- OSRD 175 PBL 4636 (I-371)  
Flesser, L. F.  
Report on "Comparative tests of various incendiary mixtures. Part III. Preliminary observations on the influence of the rubber concentration and on the effect of finely powdered nitrates." 1945.  
17p MI \$.50 Ph \$2.00.
- OSRD 176 PBL 31091 (2-941)  
Flesser, Louis F.  
Aromatic-Aliphatic nitro compounds and nitrate esters. Final report, Sep 15, 1941. Nov 1941.  
44p tables. MI \$1.00 Ph \$3.00.
- OSRD 178 PBL 23202 (2-136)  
Little, Arthur D., Inc., Cambridge, Mass.  
Use of substitute materials in the manufacture of cork plugs: Final report. Nov 1941.  
20p diagrs. MI \$.50 Ph \$2.00.
- OSRD 182 PBL 8309 (I-668)  
McAdam, W. H.  
Exhaust gas disposal. 1941.  
58p MI \$1.00 Ph \$4.00.
- OSRD 191 PBL 19783 (I-1498)  
Chipman, John  
Effect of alloying elements upon the physical and magnetic properties of Hadfield's steel for armor plate. Report to Nov 11, 1941. Dec 1941.  
23p tables. MI \$.50 Ph \$2.00.
- OSRD 213 PBL 32792 (2-583)  
Bowman, H. L.  
200-foot portable bridge. Mar 1941.  
120 drawings. MI \$1.00 Ph \$1.00.
- OSRD 214 PBL 32793 (2-801)  
Bowman, H. L.  
The Inglis bridge. Mar 1941.  
10p tables. MI \$1.00 Ph \$1.00.
- OSRD 218 PBL 32800 (2-665)  
Stryker, C. E.  
Report of Aircraft Brake Survey Committee. Final report. Jun 1941.  
52p tables. MI \$2.00 Ph \$4.00.
- OSRD 222 PBL 23759 (2-72)  
Stephens, Roderick, Jr.  
Model tests to investigate smooth water speeds of amphibious scout car. Interim report I, Aug 8-Sep 23, 1941. Sep 1941.  
32p drawings, graphs, photos, tables. MI \$.50 Ph \$3.00.
- OSRD 223 PBL 33380 (2-738)  
Bowman, H. L., and others  
Report of tests on man-ten steel bolts for H-10 portable bridge. Nov 1941.  
9p graphs, photos, tables. MI \$1.00 Ph \$1.00.
- OSRD 224 PBL 23780 (I-1589)  
Bowman, H. L.  
Portable overpass. Sep 1941.  
8p drawings. MI \$.50 Ph \$1.00.
- OSRD 225 PBL 20269 (2-188)  
Carson, William F.  
Trestle for 60-ton tanks. Report, Sep 21, 1941-Dec 31, 1942. Dec 1942.  
41p drawings. MI \$.50 Ph \$3.00.
- OSRD 226 PBL 32796 (2-744)  
Roberts, Clifford  
OSRD contract OEMer-112 (Investigation of gun turret design for light and medium tanks.) Progress report No. 1. Nov 1941.  
33p photos. MI \$1.00 Ph \$3.00.
- OSRD 227 PBL 20270 (2-188)  
Balke, Harry  
Report on pontoon bridges and ferries for tanks. May 1941.  
38p drawings. MI \$.50 Ph \$3.00.
- OSRD 233 PBL 31049 (2-876)  
Woods Hole Oceanographic Institution  
Sound transmission in sea water: a preliminary report. Feb 1941.  
86p tables, graphs, charts.  
MI \$2.00 Ph \$6.00.
- OSRD 236 PBL 31108 (3-126)  
Herring, Conyers  
Theory of the pulsations of the gas bubble produced by an under-water explosion. Oct 1941.  
84p curves. MI \$2.00 Ph \$6.00.
- OSRD 243 PBL 23772 (I-1601)  
Ives, Herbert E., and others  
Report of the Committee on Illumination, National Research Council. Oct 1941.  
25p MI \$.50 Ph \$2.00.
- OSRD 257 PBL 5253 (I-700)  
Factory Mutual Research Corporation  
Comparison tests of hand incendiaries. Jan 1943.  
8p illus. MI \$.50 Ph \$1.00.
- OSRD 257 PBL 6141 (I-436)  
Factory Mutual Research Corp.  
Development of incendiaries; monthly progress reports covering periods February 15, 1944-May 15, 1944; Jun 15-April 15, 1945.  
Various paging 1944-45.  
MI \$.50 Ph \$1.00 Series MI .50 Ph \$2.00.
- OSRD 257 PBL 5988 (I-436)  
Factory Mutual Research Corporation, Boston, Mass.  
Development of incendiaries; monthly progress report covering periods Nov 15, 1943-Feb 15, 1944.  
Various paging. MI \$.50 Ph \$1.00.
- OSRD 274 PBL 8334 (I-747)  
Stevens, S. S., and others  
I. The effects of noise on psychomotor efficiency; II. Noise reduction in aircraft as related to communicating, annoyance and aural injury. 1941.  
155p illus. MI \$2.00 Ph \$11.00.
- OSRD 275 PBL 4637 (I-371)  
Flesser, Louis F.  
Comparative tests of various incendiary mixtures. 1941.  
34p Ph \$3.00 MI \$.50.
- OSRD 276 PBA 5562 (I-559)  
Boiling, E. M. K., and McLean, Franklin C.  
Report on "The toxicity of *B*-chlorothioethyl-thiacholine-chloride." 1941.  
13p Ph \$1.00 MI \$.50.
- OSRD 278 PBL 6538 (I-1142)  
Sherwood, T. K., and Williams, G. C.  
Evaporation of falling drops. Progress report, to Oct 17, 1941. Dec 1941.  
48p tables, graphs, photos. MI \$.50 Ph \$4.00.
- OSRD 281 PBL 19793 (2-40)  
White, A. E., and Siebert, C. A.  
Report on literature survey on the low-temperature properties of metals, to October 1941, (in 7 vols.) Dec 1941.  
591p tables. MI \$6.00 Ph \$40.00.
- OSRD 285 PBA 31101 (2-790)  
Kharash, M. S.  
Kinetics of nitration: Preparation of trinitroethyl benzene. Progress report, Oct 1, 1941. Dec 1941.  
PB No. OSRD Pages Microfilm Photostat  
31101 286 12 \$1.00 \$1.00  
31102 295 21 1.00 2.00
- OSRD 288 PBL 32794 (2-583)  
Bowman, H. L.  
Structures for 60-ton tank. Dec 1941.  
3p drawings. MI \$1.00 Ph \$1.00.
- OSRD 289 PBL 32795 (2-801)  
Bowman, H. L.  
Portable bridges designed by Bethlehem Steel Company. Dec 1941.  
4p MI \$1.00 Ph \$1.00.  
Drawings not included.
- OSRD 291 PBL 8311 (I-604)  
Gilliland, E. R.  
Investigation of oxygen supply. 1941.  
38p MI \$.50 Ph \$3.00.
- OSRD 293 PBL 30740 (2-553)  
Kistakowsky, G. B., and McEwan, W. S.  
Determinations of the heats of combustion of explosives. Progress report. Dec 1941.  
21p MI \$1.00 Ph \$2.00.
- OSRD 295 PBA 31102 (2-790)  
Kharash, M. S.  
Kinetics of nitration: Preparation of trinitroethyl benzene. Progress report, Oct 1, 1941. Dec 1941.  
PB No. OSRD Pages Microfilm Photostat  
31101 286 12 \$1.00 \$1.00  
31102 295 21 1.00 2.00
- OSRD 302 PBA 5549 (I-409)  
Hurd, Charles D.  
Report on "Preparation of benzoyl isothiocyanate, bis(isothiocyanomethyl ether, symtetrachlorodinitroethane and p-aminophenyl chloride" to Dec 10, 1941. 1942.  
15p Ph \$1.00 MI \$.50.
- OSRD 304 PBA 16439 (I-1376)  
Leighton, Phillip A.  
The removal of hexamethylene-diamine. Jan 1942.  
6p tables. MI \$.50 Ph \$1.00.
- OSRD 309 PBL 8335 (I-1365)  
Beranek, L. L., and others  
Materials for sound control in airplanes. Dec 1941.  
114p photos, graph. MI \$.50 Ph \$8.00.

## Bibliography

- OSRD 311 PBL 23674 (2-354)  
Demster, A.J.  
Rocket targets. Progress report, Nov. 1, 1941. Dec 1941.  
13p MI \$.50 Ph \$1.00
- OSRD 312 PBL 31095 (2-784)  
Adams, Roger, and Marvel, C.S.  
Preparation of trinitrobenzene from benzene via picryl chloride. Progress report, Dec 1941.  
21p tables, graphs. MI \$1.00 Ph \$2.00.
- OSRD 314 PBA 58098 (5-474)  
Gillman, Henry  
Preparation of organometallic compounds as a source of toxic oxide smoke and flame thrower fuels. Jan 1942.  
63p MI \$2.00 Ph \$5.00.
- OSRD 316 PBL 23687 (2-355)  
Lakatos, Emory  
Internal ballistics of powder driven rockets. Progress report. Dec 1941.  
46p MI \$.50 Ph \$4.00.
- OSRD 317 PBL 19658 (1-1393)  
Wallace, R.L., Jr., and Ennis, Eugene  
Acoustic direction finding for aircraft interception including information on microphone for operation in high wind velocities. Dec 1941.  
55p drawings, graphs, photos. MI \$1.00 Ph \$4.00.
- OSRD 319 PBL 40560 (3-42)  
Mehl, R.F.  
Steel for gun tubes. Second progress report, Dec 15, 1941. Jan 1942.  
79p photomicrographs, drawings.  
MI \$2.00 Ph \$6.00.
- OSRD 320 PBL 23688 (2-356)  
DuMond, Jesse W.M.  
The mechanical efficiencies of rockets in empty field-free space. Progress report. Jan 1942.  
46p graphs, tables, curves.  
MI \$.50 Ph \$4.00.
- OSRD 323 PBL 23684 (2-354)  
Demster, A.J.  
A microphotographic study of flaws in ballistite powder. Progress report, Dec 1941.  
26p photos. MI \$.50 Ph \$2.00.
- OSRD 326 PBA 5551 (1-477)  
Fuson, R.C., and Marvel, C.S.  
Report on "The preparation of cacodyl and cacodyl chloride" to January 15, 1942. 1942.  
37p Ph \$3.00 MI \$.50.
- OSRD 327 PBA 5550 (1-477)  
Fuson, R.C., and Marvel, C.S.  
Report on "Attempted preparation of bis-(trichlorovinyl) sulfide by the reaction of sulfur monochloride and trichloroethylene" to January 1, 1942. 1942.  
8p Ph \$1.00 MI \$.50.
- OSRD 328 PBL 50852 (4-291)  
Allison, S.K., and others  
The barotimer, a barometrically set time fuze. Progress report. Jan 1942.  
28p drawings. MI \$1.00 Ph \$2.00.
- OSRD 332 PBA 5548 (1-479)  
Kharasch, M.S.
- Report on "The catalytic conversion of diphosgene into phosgene" to December 1, 1941. 1942.  
21p illus. Ph \$2.00 MI \$.50.
- OSRD 333 PBA 31097 (2-792)  
Smith, L.I.  
Reactions of xylene with aluminum chloride. Progress report. Jan 1942.  
6p MI \$1.00 Ph \$1.00.
- OSRD 334 PBA 31098 (2-941)  
Hurd, Charles D.  
Preparation of tetranitromethane. Progress report. Jan 1942.  
9p MI \$1.00 Ph \$1.00.
- OSRD 335 PBL 23208 (1-1600)  
Drinker, C.K., and others  
The construction of mask L-12 for oxygen inhalation in military aviation: Final report. Jan 1942.  
14p photos. MI \$.50 Ph \$1.00.
- OSRD 341 PBL 23771 (2-155)  
O'Brian, Brian  
Preliminary report on the luminosity of airplane engine exhaust plumes and methods for reducing this luminosity. May 1941.  
11p photos. MI \$.50 Ph \$1.00.
- OSRD 342 PBL 50853 (4-581)  
Schrodt, John P., and others  
The performance of small dry batteries when subjected to low air temperatures and the effect of heating the batteries internally by alternating current supplied to the battery terminals. Progress report. Jan 1942.  
28p graphs, tables. MI \$1.00 Ph \$2.00.
- OSRD 344 PBM 34115 (2-881)  
U.S. National Defense Research Commission  
A preliminary report on tests of emotional stability. Jan 1942.  
23p MI \$1.00 Ph \$2.00.
- OSRD 345 PBL 23685 (2-359)  
Dempster, A.J.  
The trajectories of target rockets. Progress report. Jan 1942.  
17p tables, curves. MI \$.50 Ph \$2.00.
- OSRD 349 PBL 34116 (3-48)  
U.S. National Defense Research Commission  
Photography of airplanes at long ranges. Progress report to the services No. 17: Sec. D-2, Fire control. Dec 1941.  
14p MI \$1.00 Ph \$1.00.
- OSRD 353 PBL 32603 (2-617)  
Molnar, Julius P.  
Report on low reflection treatment of glass surfaces. Jan 1942.  
20p MI \$1.00 Ph \$2.00.
- OSRD 354 PBL 20266 (2-191)  
Harrison, G.R., and Hornbeck, John A.  
Report on an instrument for the detection of radon. Jan 1942.  
34p diagrs. MI \$.50 Ph \$3.00.
- OSRD 355 PBL 34805 (3-172)  
Molnar, Julius P.  
Helium purity indicator. Jan 1942.  
23p chart, diagr., drawing, graph.  
MI \$1.00 Ph \$2.00.
- OSRD 358 PBL 31191 (2-893)  
Pekeris, C.L.  
Propagation of sound in a medium of variable velocity. Sep 1941.  
53p diagrs. MI \$2.00 Ph \$4.00.
- OSRD 360 PBL 20278 (2-122)  
Von Karman, Theodore  
On the propagation of elastic deformation in solids. Progress report. Jan 1942.  
8p graph. MI \$.50 Ph \$1.00.
- OSRD 368 PBL 12148 (1-677)  
Weith, A.J., and Turkington, V.H.  
Protective coatings for naval aircraft. Feb 1942.  
48p illus. MI \$.50 Ph \$4.00.
- OSRD 368A PBA 12150 (1-1045)  
Mease, R.T.  
Development of substitutes for silk in powder bags, as of December 31, 1941. Feb 1942.  
6p MI \$.50 Ph \$1.00.
- OSRD 369 PBL 27307 (2-825)  
Bethel, H.A.  
The specific heat of air up to 25,000° C. Feb 1942.  
33p tables. MI \$1.00 Ph \$3.00.
- OSRD 370 PBL 39700 (3-396)  
Wiener, Norbert  
The extrapolation, interpolation and smoothing of stationary time series, with engineering applications. Feb 1942.  
178p table. MI \$4.00 Ph \$12.00.
- OSRD 373 PBL 31204 (2-859)  
Goranson, R.W.  
Methods for detecting defects in the base of a shell forging. Progress report. Jan 1942.  
25p diagrs., tables, photo.  
MI \$1.00 Ph \$2.00.
- OSRD 375 PBL 8079 (1-564)  
Brown, Weldon G.  
Report on "Mechanical formation of fog." 1942.  
25p illus. MI \$.50 Ph \$2.00.
- OSRD 378 PBL 60932 (4-1069)  
U.S. National Defense Research Commission  
Progress report to the services No. 21: Section D-2, Fire Control. Feb 1942.  
2p MI \$1.00 Ph \$1.00.
- OSRD 379 PBA 5552 (1-478)  
Hellerman, Leslie  
Report on "The action of mustard gas upon urease and papain" to January 15, 1942. 1942.  
23p MI \$.50 Ph \$2.00.
- OSRD 380 PBL 40536 (3-341)  
Dowez, Pol. E.  
Preliminary experiments on the propagation of plastic deformation. Progress report. Feb 1942.  
21p curves, diagr. MI \$1.00 Ph \$2.00.  
Supplement to PB 20278.
- OSRD 382 PBL 5246 (1-441)  
Russell, R.P.  
Report on "The development of oil incendiary bombs." 1942.  
66p illus. Ph \$5.00 MI \$1.00.

## Bibliography

- OSRD 383 PBL 22316 (2-545)  
 Stevens, S. S., and others  
 Articulation testing methods, including wordlists for the testing of communication systems. Feb 1942.  
 55p curves, graphs, charts.  
 Mi \$1.00 Ph \$4.00.
- OSRD 407 PBA 5555 (I-537)  
 Bartlett, Paul D.  
 Supplementary report on "Improved methods for the Manufacture of M-I (Lewisite)" to February 12, 1942. 1942.  
 3p Ph \$1.00 Mi \$.50.
- OSRD 408 PBA 5553 (I-537)  
 Bartlett, Paul D.  
 Report on "The M-I oxides (beta-chlorovinyl-arsine oxide). The preparation of slightly impure isomer I oxide and pure isomer II oxide," to February 10, 1942. 1942.  
 5p Ph \$1.00 Mi \$.50.
- OSRD 409 PBL 8310 (I-571)  
 Sweeney, W. J.  
 Report on "Engine tests with chemical sources of oxygen and with liquid oxygen," to December 23, 1941. 1942.  
 22p Mi \$.50 Ph \$2.00.
- OSRD 410 PBL 34111 (3-47)  
 U. S. National Defense Research Committee  
 Selection of stereoscopic range finder operators. Progress report to the services No. 22 Sect. D-2, Fire Control. n.d.  
 5p Mi \$1.00 Ph \$1.00.
- OSRD 411 PBL 58240 (4-851)  
 Shannon, Claude E.  
 Theory and design of linear differential equation machines. Jan 1942.  
 90p diagrs. Mi \$2.00 Ph \$6.00.
- OSRD 412 PBL 31099 (2-818)  
 MacDougall, D. P.  
 Increased visibility of A. A. shell bursts. Progress report. Feb 1942.  
 6p photo. Mi \$.50 Ph \$1.00.
- OSRD 413 PBL 12140 (I-577)  
 Meith, A. J., and Turkington, V. H.  
 Protective coatings for ship bottoms and naval aircraft. Feb 1942.  
 15p Mi \$.50 Ph \$1.00.
- OSRD 414 PBL 8078 (I-700)  
 Brown, George Granger, and others  
 Report on "The Formation of screening smokes," Jan 1942.  
 17p illus. Mi \$.50 Ph \$1.00.
- OSRD 415 PBL 23675 (2-297)  
 Fowler, W. A.  
 The design, development and testing of rocket targets. Progress report, Feb 1, 1942. Feb 1942.  
 48p drawings, graphs, photos, tables.  
 Mi \$.50 Ph \$4.00.
- OSRD 432 PBA 5241 (I-553)  
 Hottef, H. C., and Wilkes, Gordon B.  
 Wood flammability under various conditions of irradiation. 1942.  
 26p illus. Ph \$2.00 Mi \$.50.
- OSRD 435 PBL 40558 (3-549)  
 Hoover, C. R.
- The development of flares suitable for underwater use. Final report. Feb 1942.  
 51p photos, diagrs, tables. Mi \$.50 Ph \$4.00.
- OSRD 436 PBL 43048 (4-1065)  
 Sherwood, T. K.  
 Report on screening smokes. Progress report Mar 1942.  
 21p photos, drawings, tables. Mi \$.50 Ph \$2.00.
- OSRD 437 PBL 16441 (I-1376)  
 Pierce, W. C., and others  
 The value of soda lime in gas absorbents. Mar 1942.  
 19p tables. Mi \$.50 Ph \$2.00.
- OSRD 439 PBL 8312 (I-604)  
 Gilliland, E. R.  
 Report on "Investigation of oxygen supply" to March 1, 1942. 1942.  
 38p Mi \$.50 Ph \$3.00.
- OSRD 445 PBL 27280 (2-609)  
 Sage, B. H., and Lacey, W. N.  
 Extrusion of ballistite tubing and rod. Progress report. Mar 1942.  
 74p curves, drawings, graphs, tables. Mi \$2.00 Ph \$5.00. (See also PB 27281 and 27282)
- OSRD 448 PBL 39707 (3-158)  
 Dole, Malcolm, and Klotz, Irving M.  
 Electrical resistance and temperature of charcoals. Progress report. Dec 1941.  
 44p graphs. Mi \$1.00 Ph \$3.00.
- OSRD 450 PBL 8321 (I-606)  
 Prentiss, S. S.  
 Report on tests on oxygen rectification equipment. 1942.  
 13p Mi \$.50 Ph \$1.00.
- OSRD 451 PBL 6579 (I-429)  
 Kistiakowsky, G. B.  
 Report on "The study of the mechanism of the physiological action of Mustard by means of Radioactive Mustard" to March 6, 1942. 1942.  
 18p Mi \$.50 Ph \$2.00.
- OSRD 453 PBL 32797 (2-744)  
 Roberts, Clifford  
 OSRD contract Oemar-112 (tank turrets). Progress report to Mar 2, 1942. Mar 1942.  
 20p Mi \$1.00 Ph \$1.00.
- OSRD 454 PBL 33985 (2-799)  
 Harris, Herbert, Jr.  
 The analysis and design of servomechanisms. Progress report to the service No. 23. n.d.  
 81p graphs, diagr. Mi \$2.00 Ph \$7.00.
- OSRD 461 PBL 34804 (3-246)  
 Molnar, Julius P.  
 Radio telemetering of aircraft instruments. Mar 1942.  
 20p Mi \$1.00 Ph \$2.00.
- OSRD 464 PBA 12056 (I-985)  
 Kistiakowsky, George B.  
 Preparation of radioactive Adamsite and mustard. Report to March 4, 1942. 1942.  
 5p Mi \$.50 Ph \$1.00.
- OSRD 465 PBL 32802 (2-807)  
 Bowman, H. L.
- Report on tests on Douglas fir balk for pontoon bridges. n.d.  
 46p curves, tables, photos. Mi \$1.00 Ph \$4.00.
- OSRD 466 PBL 27281 (2-606)  
 DuMond, Jesse W. M.  
 A vacuum press for the extrusion of solventless double base ballistite for use in rockets. Progress report. Mar 1942.  
 51p drawings, photos. Mi \$2.00 Ph \$4.00.  
 See also PB 27280 and 27282.
- OSRD 468 PBL 8077 (I-797)  
 Hottef, H. C.  
 Report on "Production of smokes of controlled size by use of induction nozzles." Jan 1942.  
 29p illus. Mi \$.50 Ph \$2.00.
- OSRD 469 PBA 50801 (5-473)  
 Bartlett, Paul D.  
 Urea peroxide as a possible decontaminant for M-I and HS. Report to February 11, 1942. Mar 1942.  
 3p Mi \$1.00 Ph \$1.00.
- OSRD 470 PBA 5547 (I-476)  
 Bartlett, Paul D.  
 Report on "The geometrical isomers of M-I (Lewisite)" to March 3, 1942. 1942.  
 12p Ph \$1.00 Mi \$.50.
- OSRD 473 PBL 27282 (2-609)  
 Sage, B. H., and Lacey, W. N.  
 Extrusion of ballistite tube from solventless sheet stock. Progress report, Feb 23, 1942. Mar 1942.  
 32p drawings, graphs, tables, photos. Mi \$1.00 Ph \$3.00.
- OSRD 479 PBL 15883 (I-1245)  
 Aborn, R. H., and Stitt, J. B.  
 Report on "Studies and investigations in connection with research needs in the field of welding ordnance steels." Jan 1942.  
 29p Mi \$.50 Ph \$2.00.
- OSRD 480 PBL 19817 (I-1576)  
 Chipman, John, and Kaufman, A. R.  
 Ballistic tests on some experimental non-magnetic steels for armor plate. Progress report, Mar 10, 1942. Mar 1942.  
 21p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 487 PBL 6704 (I-565)  
 Langmuir, Irving  
 Smoke generator. 1942.  
 5p illus. Mi \$.50 Ph \$1.00.
- OSRD 488 PBL 23780 (2-135)  
 Huber, Paul  
 Summary of noise investigation on M-3 light tank #909. Apr 1942.  
 41p drawings, graphs, photos. Mi \$.50 Ph \$3.00.
- OSRD 490 PBL 15882 (I-939)  
 Menl, Robert F.  
 Steel for gun tubes; Report, Mar 15, 1942. Mar 1942.  
 48p photos, tables, graphs. Mi \$.50 Ph \$4.00.

## Bibliography

- OSRD 491 PBL 8320 (I-538)  
Glaue, W. F.  
Report on cascade oxygen system. 1942.  
57p Mi \$1.00 Ph \$4.00.
- OSRD 493 PBM 6002 (I-430)  
Northrop, John H.  
Detection of HS, H-I, ED or PDA with trained dogs or rats. 1942.  
12p Ph \$1.00 Mi \$.50.
- OSRD 495 PBL 40626 (3-482)  
Seitz, Frederick, Jr., and others  
The plastic properties of metals at high rates of strain. Progress report. Apr 1942.  
32p photos, graphs, drawings.  
Mi \$1.00 Ph \$3.00.
- OSRD 497 PBL 19655 (I-1424)  
Hoover, C. R.  
Aerial photograph flash powders, composition and use: Final report, Feb 15, 1942.  
Apr 1942.  
76p graphs, tables. Mi \$1.00 Ph \$6.00.
- OSRD 498 PBL 18481 (I-1177)  
Goranson, Roy W., and others  
The measurement of large transient stresses. Apr 1942.  
36p curves, diagrs, drawings.  
Mi \$.50 Ph \$3.00.
- OSRD 501 PBL 23676 (2-301)  
Smythe, W. R.  
A projector for rocket targets. Progress report, Feb 24, 1942. Mar 1942.  
19p drawings, photos. Mi \$.50 Ph \$2.00.
- OSRD 504 PBA 6003 (I-479)  
Kharasch, M. S.  
The preparation of diphosgene. 1942.  
20p illus. Ph \$2.00 Mi \$.50.
- OSRD 507 PBA 6006 (I-681)  
Fusion, R. C., and Marvel, C. S.  
Report on "Catalytic production of homologues of cacodyl and their derivatives," to March 27, 1942. 1942.  
6p Mi \$.50 Ph \$1.00.
- OSRD 517 PBL 15856 (I-1428)  
Bole, George A., and Orlowski, Howard J.  
Acceptance test for firebrick: pouring box refractories. Final report, Mar 16, 1942.  
Mar 1942.  
51p diagrs., photos, tables.  
Mi \$1.00 Ph \$4.00.
- OSRD 519 PBL 15891 (I-968)  
Karman, Theodor von  
The model supersonic wind tunnel; progress report. Mar 1942.  
57p photos, drawings. Mi \$1.00 Ph \$4.00.
- OSRD 523 PBL 32190 (2-807)  
Wilson, E. B., Jr., and Cole, R. H.  
Measurement of underwater explosion pressures. Progress report. Apr 1942.  
44p diagrs. Mi \$1.00 Ph \$3.00.
- OSRD 534 PBA 6005 (I-477)  
Fusion, R. C., and Marvel, C. S.  
Attempted chloromethylation of HS. 1942.  
5p Ph \$1.00 Mi \$.50.
- OSRD 537 PBL 8076 (I-629)  
Olson, Axel R., and Gould, George D.
- Report on "Use of aqueous solutions for producing screening fogs or smokes by pneumatic spray nozzles." 1942.  
13p illus. Mi \$.50 Ph \$1.00.
- OSRD 638 PBL 30801 (2-786)  
Whitmore, F. C.  
Investigation of the melting point of RDX. Progress report. Apr 1942.  
10p drawing. Mi \$1.00 Ph \$1.00.
- OSRD 639 PBL 58096 (5-27)  
National Defense Research Committee  
Report on a design for an interval control. Apr 1942.  
32p photos, drawings, tables.  
Mi \$1.00 Ph \$3.00.
- OSRD 545 PBL 32189 (2-825)  
Bethe, H. A.  
Report on the theory of shock waves for an arbitrary equation of state. May 1942.  
86p curves. Mi \$2.00 Ph \$6.00.
- OSRD 547 PBL 23593 (2-317)  
Hirschfelder, J. O., and others  
Thermochemistry and the equation of state of the propellant gases. Progress report. Apr 1942.  
113p graphs. Mi \$1.50 Ph \$8.00.
- OSRD 548 PBA 6004 (I-478)  
Gillman, Henry  
Organic-tin compounds. 1942.  
28p Ph \$2.00 Mi \$.50.
- OSRD 549 PBL 31090 (2-616)  
Neuman, John  
Theory of detonation waves. Progress report. Apr 1, 1942. May 1942.  
36p figures. Mi \$1.00 Ph \$3.00.
- OSRD 558 PBL 27276 (2-582)  
Schrodt, John P., and others  
The National Bureau of Standards battery for low temperature operation. Progress report. May 1942.  
28p graphs, photos. Mi \$1.00 Ph \$2.00.
- OSRD 559 PBL 31202 (2-660)  
MacDougall, D. P.  
Increased visibility of A. A. shell bursts. Final report. May 1942.  
13p photos, tables. Mi \$1.00 Ph \$1.00.
- OSRD 560 PBL 30774 (2-785)  
MacDougall, D. P.  
Some properties of NENO and MNO as explosives. Progress report. May 1942.  
8p tables. Mi \$1.00 Ph \$1.00.
- OSRD 562 PBL 32803 (2-801)  
Bowman, H. L.  
Possible use as a railway bridge of the H-20 highway bridge. May 1942.  
10p tables, drawings. Mi \$1.00 Ph \$1.00.
- OSRD 568 PBL 27311 (2-608)  
Roberts, Clifford  
Contract OEMar-112 (Tank turrets). Progress report, May 1, 1942. Apr 1942.  
2p Mi \$1.00 Ph \$1.00.
- OSRD 570 PBL 40559 (3-400)  
Northrop, John H.  
Amplifier to replace galvanometer in potentiometric titration of small amounts
- of H-I, HS, ED or DML Supplement to Progress report, Apr 13, 1942. May 1942.  
3p diagr. Mi \$1.00 Ph \$1.00.
- OSRD 574 PBL 8317 (I-538)  
Diehl, Harvey  
Report on "Development of oxygen carrying chemicals." 1942.  
40p Mi \$.50 Ph \$3.00.
- OSRD 575 PBL 20165 (2-250)  
Cawein, Madison  
Developmental model of an interference generator for the 2 to 20 megacycle spectrum. Progress and final reports on project #58. Aug 1941-May 1942.  

PB	OSRD	Microfilm	Photostat	Pt
20165	575	\$1.00	\$5.00	Final
20172	"	.50	2.00	1
20173	"	.50	1.00	3
20170	"	.50	1.00	4
20169	"	.50	1.00	5
20171	575	.50	1.00	6
- OSRD 577 PBL 23683 (2-300)  
Sege, B. H., and Lacey, W. N.  
Preliminary report on the use of ballistite turnings in primers. Progress report. May 1942.  
16p drawings, graphs, tables.  
Mi \$.50 Ph \$2.00.
- OSRD 578 PBL 36958 (3-49)  
U. S. National Defense Research Committee  
The precision, consistency, and accuracy of visual range observations. May 1942.  
73p drawings, graphs, diagrs.  
Mi \$2.00 Ph \$5.00.
- OSRD 582 PBL 15886 (I-937)  
Aborn, R. H., and others  
Survey of literature and industrial practice in the welding of armor. Apr 1942.  
45p diagrs, tables. Mi \$.50 Ph \$3.00.
- OSRD 585 PBL 23682 (2-299)  
King, R. B., and others  
The chemical warfare grenade. Progress report. May 1942.  
26p diagrs, graphs, photos. Mi \$.50 Ph \$2.00.
- OSRD 587 PBL 4638 (I-371)  
Fleser, Louis F.  
Recommendation for the filling and firing of the 100-lb. oil incendiary bomb (M-47 and M-47A1). 1942.  
37p illus. Ph \$3.00 Mi \$.50.
- OSRD 588 PBL 32182 (2-826)  
Kirkwood, John G., and Bethe, Hans A.  
The pressure wave produced by an underwater explosion: Part I. Progress report. May 1942.  
76p curves. Mi \$2.00 Ph \$6.00.
- OSRD 590 PBL 24898 (2-192)  
Long, F. A.  
An apparatus for the determination of particle size (00-04). Final report. May 1942.  
18p curves, diagrs. Mi \$.50 Ph \$2.00.
- OSRD 592 PBL 34112 (3-47)  
Flood, Merrill M., and Fry, T. C.  
Selection of stereoscopic range finder operators. Report to the services No. 30: Sect. D-2, Fire control. May 1942.  
7p Mi \$1.00 Ph \$1.00.  
See PB 34136 for final report.

## Bibliography

7

- OSRD 605 PBL 23691 (2-296)  
Burchard, J. E.  
The new vertical firing chamber and concrete laboratory at Princeton University. Progress report. May 1942. 29p plans, photos. MI \$.50 Ph \$2.00.
- OSRD 605 PBL 23680 (2-296)  
Davis, Leverett, Jr., and Robinson, Charles F.  
Controlled striking angle of rocket projectiles. Progress report. May 1942. 28p diagrs, photos, tables. MI \$.50 Ph \$2.00.
- OSRD 607 PBL 15003 (1-940)  
Norton, F. H.  
Development of a substitute for sillimanite in pouring rings used in special steel foundry practice; final report. May 1942. 30p graphs, diagrs. MI \$.50 Ph \$2.00.
- OSRD 608 PBL 23781 (2-135)  
Hayward, Frank W.  
Sprocket noise investigation on M-3 light tank #6305 (Serial #909). May 1942. 24p photos. MI \$.50 Ph \$2.00.
- OSRD 609 PBL 23782 (2-135)  
Hayward, Frank W.  
Approach noise tests on M3 light tank #6305 (Series No. 909). May 1942. 29p graphs. MI \$.50 Ph \$2.00.
- OSRD 610 PBL 23783 (2-136)  
Hayward, Frank W.  
Track noise and vibration tests on M3 light tank #6305 (Serial #909). May 1942. 18p MI \$.50 Ph \$2.00.
- OSRD 611 PBL 23681 (2-354)  
Clark, D. S.  
Equipment and procedure for static firing tests. Progress report. Jun 1942. 34p photos, diagrs, curves, drawings, tables. MI \$.50 Ph \$3.00.
- OSRD 612 PBL 30775 (2-746)  
Western Cartridge Co., East Alton, Ill.  
Engineering laboratory investigation of cyclonite processes. Final report, May 1942. Jun 1942. 106p photos, graphs. MI \$3.00 Ph \$8.00.
- OSRD 613 PBL 8313 (1-604)  
Billingsland, E. R.  
Report on "Investigation of oxygen supply," 1942. 50p MI \$.50 Ph \$4.00.
- OSRD 614 PBL 28630 (2-461)  
Cloud, G. H., and others  
Operation of Diesel engines on oxygen. Progress report, Dec 2, 1941-Apr 15, 1942. Jun 1942. 38p tables, graphs, diagrs. MI \$1.00 Ph \$3.00.
- OSRD 615 PBL 23769 (2-105)  
Hottel, H. C.  
Studies on fuel projection from nozzles. Progress report. Apr 25, 1942, Jun 1942. 12p drawings, graphs, tables. MI \$.50 Ph \$1.00.
- OSRD 616 PBL 34126 (3-46)  
U. S. National Defense Research Committee and Graham, Clarence H.
- The relation of National Research Council neurotic inventory scores and intelligence. Report to the services No. 27: Sect. D-2, Fire Control. May 1942. 5p tables, graphs. MI \$1.00 Ph \$1.00.
- OSRD 622 PBL 34127 (2-891)  
U. S. National Defense Research Committee  
Relative position of reticle and target in the stereoscopic rangefinder. May 1942. 18p graphs, tables. MI \$1.00 Ph \$2.00.
- OSRD 623 PBL 23784 (5-890)  
Hayward, Frank W.  
Noise in the crew compartment of M-3 light tank No. 909. Apr 1942. 23p photos. MI \$.50 Ph \$2.00.
- OSRD 624 PBL 50851 (4-451)  
Rudmose, H. W., and others  
Sound level measurements in U. S. military airplanes. May 1942. 29p graphs, tables. MI \$2.00 Ph \$7.00.
- OSRD 626 PBL 34129 (3-49)  
U. S. National Defense Research Committee  
Relation of accuracy and variability of stereoscopic anti-aircraft rangefinding operation to correct interocular setting of the instrument. Report to the services No. 29: Sect. D-2, Fire control. May 1942. 5p curves. MI \$1.00 Ph \$1.00.
- OSRD 631 PBL 63648 (5-214)  
Whittemore, H. L., and Sweetman, L. R.  
Method of investigating the deformation of deformable projectiles. Jun 1942. 7p graph, photo, drawing. MI \$1.00 Ph \$1.00.
- OSRD 637 PBL 32717 (3-119)  
Hottel, H. C., and Garraway, G. H.  
Joint report on status of NDRC projects on flame-throwers. Progress report. Jun 1942. 22p photos, drawings, graphs. MI \$1.00 Ph \$2.00.
- OSRD 652 PBL 30778 (2-786)  
Whitmore, F. C.  
Preparation of MMX. Progress report. Jun 1942. 16p photomicrographs. MI \$1.00 Ph \$2.00.
- OSRD 654 PBL 30777 (2-787)  
Whitmore, F. C.  
The potentiometric titration of filtrates from the Bachmann process. Progress report. Jun 1942. 19p tables, graphs. MI \$1.00 Ph \$2.00.
- OSRD 657 PBL 5244 (1-505)  
Thompson, W. J.  
"Experiments with incendiary mixtures" and "Fire test structure and development of incendiary bombs." 1942. 5p illus. Ph \$4.00 MI \$1.00.
- OSRD 659 PBL 32179 (2-828)  
Zener, C., and Hollomon, J. H.  
Addendum to von Karman's theory of the propagation of plastic deformation in solids. Jun 1942. 8p graphs. MI \$1.00 Ph \$1.00.  
See also PB 20278 and PB 18885.
- OSRD 663 PBL 27277 (2-731)  
Bennett, Evert G., and Cook, Richard K.
- Firing of squibs by condenser discharge, energy losses in thyratrons. Progress report. Jun 1942. 18p diagrs, graphs. MI \$1.00 Ph \$1.00.
- OSRD 664 PBL 23188 (4-203)  
Bohnenblust, H. F.  
A note on von Karman's theory of the propagation of plastic deformation in solids. Jun 1942. 9p graphs. MI \$1.00 Ph \$1.00.
- OSRD 670 PBL 16488 (1-1548)  
Prelman, Albert  
Developmental model of an interference generator for the 15 to 30 megacycle spectrum. Final report on project C-28. Jun 1942. 114p photos, diagrs, curves. MI \$1.50 Ph \$8.00.
- OSRD 675 PBL 27312 (2-608)  
Roberts, Clifford  
Contract OEHAR-112 (gun turret design for light and medium tanks). Final report. Jun 1942. 37p MI \$1.00 Ph \$3.00.
- OSRD 676 PBL 32183 (2-826)  
Kirkwood, John G., and Montroll, Elliott, M.  
The pressure wave produced by an underwater explosion: Part II. Progress report. Jun 1942. 46p tables. MI \$1.00 Ph \$3.00.
- OSRD 677 PBL 5245 (1-502)  
Kharasch, M. S., and Westheimer, F. H.  
Development of SDG as an incendiary material, particularly as a hand incendiary. 1942. 34p illus. Ph \$3.00 MI \$.50.
- OSRD 678 PBL 32804 (2-801)  
Bowman, H. L.  
Report of tests of balk fasteners for the 25-ton and 10-ton pontoon bridges. Jun 1942. 7p tables, photos. MI \$1.00 Ph \$1.00.
- OSRD 679 PBL 20277 (2-188)  
Bowman, H. L.  
Report to the Engineer Board on a truss and pontoon bridge for 60-ton tanks, Jun 1942. 30p drawings, photos, tables. MI \$.50 Ph \$2.00.  
See also PB 20289.
- OSRD 680 PBL 5589 (1-454)  
Hutchens, John O., and others  
Report on "Constant flow micro-apparatus for exposure of mice to volatile toxic agents under controlled conditions," to May 12, 1942. 1942. 18p illus. Ph \$2.00 MI \$.50.
- OSRD 683 PBL 27308 (2-585)  
McMaster, Philip D.  
A method for delivering equal amounts of fluids of differing physical properties. Progress report. Jul 1942. 10p tables. MI \$1.00 Ph \$1.00.
- OSRD 684 PBL 31110 (3-54)  
Pekeris, C. L.  
Theoretical discussion of reverberation. May 1942. 30p curves. MI \$1.00 Ph \$2.00.

## Bibliography

- OSRD 685 PBL 5243 (I-500).  
Cousins, E. W.  
Effect of nozzle design on the range of  
burning jets. 1942.  
9p illus. Ph \$1.00 Mi \$.50.
- OSRD 689 PBL 32805 (2-801).  
Bowman, R. L.  
Welded steel balk fasteners. n.d.  
16p photos. Mi \$.100 Ph \$1.00.
- OSRD 694 PBA 34797 (3-81).  
Johnson, John R.  
Crystallographic studies of RDX, HMX  
and related compounds. Progress report,  
Jun 30, 1942.  
30p diagrs. Mi \$.100 Ph \$2.00.
- OSRD 696 PBL 23690 (2-268).  
Rojansky, V.  
Theory of a two-dimensional ballistic  
pendulum. Progress report. Jul 1942.  
20p diagrs. Mi \$.50 Ph \$2.00.
- OSRD 705 PBL 31119 (3-97).  
Bell Telephone Laboratory, New York (City)  
A subaqueous projector for hydrophone  
calibrations in the audible frequency  
range. Jun 1942.  
55p photos, curves, diagrs, tables.  
Mi \$.200 Ph \$.400.
- OSRD 707 PBL 27278 (2-732).  
Hooton, Robert D.  
Radar ranging on antiaircraft shell bursts.  
Progress report, May 1, 1942. Jul 1942.  
35p Mi \$.100 Ph \$3.00.
- OSRD 711 PBL 32806 (2-652).  
Bowman, R. L.  
Tests of metal balk. Jul 1942.  
8p curves, photos. Mi \$.100 Ph \$.100.
- OSRD 716 PBL 31111 (2-796).  
Dietze, E.  
Calibration of electro-acoustic trans-  
ducers for hydrophonic systems. Apr 1942.  
28p charts, curves. Mi \$.100 Ph \$2.00.
- OSRD 721 PBL 34113 (2-890).  
U. S. National Defense Research Committee  
Selection of stereoscopic range finder  
operators. Jul 1942.  
38p drawings, diagrs. Mi \$.100 Ph \$3.00.
- OSRD 722 PBL 16755 (I-1024).  
Cross, M. C., and others  
Compilation of current data on selected  
alloys suitable for high temperature service in  
gas turbine and supercharger parts. Jul 1942.  
18p tables. Mi \$.50 Ph \$2.00.
- OSRD 723 PBA 6702 (I-827).  
Price, Charles C.  
The hydrolysis of beta beta' dichloro-  
diethylsulfide in the vapor phase. The  
quantitative estimation of beta beta' dichloro-  
diethylsulfide in solution. May 1942.  
17p Mi \$.50 Ph \$2.00.
- OSRD 724 PBA 30708 (3-551).  
Smith, Lee I.  
The preparation of certain hindered amides.  
Progress report, Apr 4, 1942. Jul 1942.  
9p Mi \$.100 Ph \$.100.
- OSRD 730 PBL 23774 (2-467).  
Robert, Martin, Jr.  
—61580
- Theory and design of rectangular sound  
absorbing ducts. Jun 1942.  
36p charts, graphs. Mi \$.50 Ph \$3.00.
- OSRD 731 PBL 15881 (I-938).  
Mehl, Robert F., and others  
Steel for gun tubes. Progress report:  
Jul 15, 1942. Jul 1942.  
84p photos, tables, diagrs, graphs.  
Mi \$.100 Ph \$.60.
- OSRD 732 PBL 60933 (4-1061).  
Barber-Colman Company, Rockford, Ill.  
Description and operating instructions for  
short range A.A. director T-21. Jun 1942.  
21p photos, diagr, drawing.  
Mi \$.100 Ph \$.20.
- OSRD 739 PBA 6001 (I-802).  
Smith, Lee I.  
Report on "The preparation of o-amino-  
benzaldehyde" to April 10, 1942. 1942.  
8p Mi \$.50 Ph \$.100.
- OSRD 742 PBL 18480 (I-1414).  
White, Merlin P., and Griffis, LaVan  
The permanent strain in a uniform bar due  
to longitudinal impact. Jul 1942.  
46p Mi \$.50 Ph \$4.00.
- OSRD 744 PBA 5987 (I-565).  
Kirkpatrick, E. C.  
Study of polymers for thickening gasoline,  
period November 15-December 15, 1943. 1943.  
2p Mi \$.50 Ph \$.100.
- OSRD 745 PBL 31114 (2-795).  
Foldy, Leslie L.  
Properties of acoustic screens for under-  
water applications. Jul 1942.  
7p Mi \$.100 Ph \$.100.
- OSRD 749 PBM 39708 (3-547).  
Kharasch, M. S.  
A study of peroxides suitable for the treat-  
ment of M-1 burns. Progress report. Jul 1942.  
8p table, graphs. Mi \$.100 Ph \$.100.
- OSRD 752 PBA 6706 (I-829).  
Adams, Roger, and others  
The preparation of some high molecular  
weight esters. Apr 1942.  
32p Mi \$.50 Ph \$3.00.
- OSRD 754 PBL 20271 (2-188).  
Bowman, R. L.  
Tub bridge. Jul 1942.  
10p drawings. Mi \$.50 Ph \$.100.
- OSRD 755 PBL 31208 (2-902).  
Knap, Robert T., and others  
The high speed water tunnel at the Califor-  
nia Institute of Technology. Jun 1942.  
33p photos, diagrs. Mi \$.100 Ph \$3.00.
- OSRD 756 PBL 18478 (I-1232).  
Lompson, G. M.  
The measurement of transient stress,  
displacement and pressure. Progress report.  
Jul 1942.  
39p diagrs. Mi \$.50 Ph \$3.00.
- OSRD 758 PBL 23689 (2-296).  
Davis, Leverett, Jr., and others  
The antisubmarine bomb: Part I. Progress  
report. Jul 1942.  
56p Mi \$.100 Ph \$.400.
- OSRD 760 PBL 18482 (I-1245).  
Billett, H. W.  
Report to Far Eastern Branch, Military  
Intelligence Service, War Department on ab-  
stract of confidential report on nickel in  
Japan, Jul 1942. Aug 1942.  
21p Mi \$.50 Ph \$.20.
- OSRD 763 PBL 27279 (2-539).  
Mease, Ralph T.  
Treatments and tests for cotton fabrics  
for powder bags. Progress report. Jul 1942.  
17p tables. Mi \$.100 Ph \$.20.
- OSRD 765 PBL 30779 (2-742).  
Adler, Howard  
Dry loading of white phosphorus into  
burst tubes. Progress report. Jul 1942.  
13p diagrs. Mi \$.100 Ph \$.100.
- OSRD 768 PBL 23688 (2-297).  
Fowler, W. A.  
Preliminary tests of the vertical bomb-  
ing of submarines from airplanes. Prelimin-  
ary report. Aug 1942.  
36p graphs, photos, tables.  
Mi \$.50 Ph \$.300.
- OSRD 770 PBL 15904 (I-1188).  
Stitt, J. R., and Chedsey, William R.  
Survey of literature and industrial pract-  
ices on precipitation hardening alloys in  
armor welding. Jul 1942.  
12p Mi \$.50 Ph \$.100.
- OSRD 771 PBL 15902 (I-940).  
Stitt, J. R., and Chedsey, William R.  
Survey of literature and industrial data on  
dilution characteristics of alloy steels used  
in ordnance and their significance in welding.  
(00-37), (1). and (00-37) (2). July 1942.  
44p tabs, graphs. Mi \$.50 Ph \$.300.
- OSRD 774 PBL 31112 (2-794).  
Dietze, E.  
Absolute efficiency of projectors and  
hydrophones. Aug 1942.  
8p Mi \$.100 Ph \$.100.
- OSRD 777 PBL 24896 (2-187).  
Ayres, Eugene  
Spontaneous ignitors for gasoline-fuming  
nitric acid mixtures. Progress report, Jul  
18, 1942. Aug 1942.  
28p diagrs, graph, tables. Mi \$.50 Ph \$2.00.
- OSRD 779 PBL 8315 (I-637).  
Pauling, Linus, and others  
Report on improvements in instrument for  
measuring. 1942.  
8p Mi \$.50 Ph \$.100.
- OSRD 780 PBL 8319 (I-530).  
Linde Air Products Co.  
Report on analysis of liquid air rectifi-  
cation cycles. 1942.  
23p Mi \$.50 Ph \$.200.
- OSRD 781 PBL 32180 (2-989).  
Bohnenblust, H. F.  
Comments on White and Griffis' theory of  
the permanent strain in a uniform bar due to  
longitudinal impact. Aug 1942.  
11p Mi \$.100 Ph \$.100.  
See also PB 18480.

## Bibliography

9

- OSRD 783 PBL 15646 (I-1068)  
Carnegie Institution of Washington, Department of Terrestrial Magnetism  
Report on College (Alaska) Observatory, March 1941 through June 1942. Aug 1942.  
31p graphs, tables, photos. MI \$.50 Ph \$3.00.
- OSRD 787 PBL 30778 (2-785)  
McGill, Russell  
Chemical tests for new explosives. Progress report, Jul 1, 1942. Aug 1942.  
21p graphs, photos. MI \$.100 Ph \$2.00.
- OSRD 788 PBL 24197 (2-201)  
Kirkwood, John G.  
Memorandum on the plastic deformation of marine structures by an underwater explosion. Progress report. Aug 1942.  
21p MI \$.50 Ph \$2.00.
- OSRD 793 PBL 27285 (2-805)  
Africano, Alfred, and Golden, Sidney  
Tests of the 4.2-in. chemical mortar. Progress report. Aug 1942.  
23p curves, photos, tables. MI \$.100 Ph \$2.00.
- OSRD 795 PBL 31184 (2-886)  
Fusion, R. C., and Marvel, C. S.  
The action of decontaminants on mustard gas. Progress report, Jun 5, 1942. Aug 1942.  
34p tables. MI \$.100 Ph \$3.00.
- OSRD 796 PBL 5128 (I-538)  
Hamilton, Cliff S.  
Report on furan arsenicals to June 25, 1942. Aug 1942.  
15p Ph \$.100 MI \$.50.
- OSRD 798 PBL 5644 (I-504)  
Bartlett, Paul D.  
Report on "The corrosion of steel by H-I (Lewisite)" to June 10, 1942. 1942.  
10p illus. Ph \$.100 MI \$.50.
- OSRD 803 PBL 63440 (5-296)  
Smith, Nicholas M., Jr.  
Piezoelectric projectile accelerometer and a borefriction gage. Progress report. Aug 1942.  
28p photos, drawings. MI \$.100 Ph \$2.00.
- OSRD 809 PBL 6178 (I-754)  
Bell, E. M. K., and others  
Toxicity and incidence of lipid pneumonia upon inhalation of automobile oil cloud. 1942.  
8p Ph \$.100 MI \$.50.
- OSRD 811 PB 31118 (2-794)  
Dietze, E.  
The absolute efficiency of a device used as a projector and as a hydrophone. Aug 1942.  
7p MI \$.100 Ph \$.100.
- OSRD 813 PBL 32184 (2-827)  
Kirkwood, John G., and Richardson, John M.  
The pressure wave produced by an underwater explosion: Part III. Progress report. Aug 1942.  
18p MI \$.100 Ph \$2.00.
- OSRD 814 PBL 15830 (I-940)  
Stitt, J. E., and Chedsey, W. R.  
Survey of literature and industrial practice in the evaluation and relief of residual stresses in welded ordnance structures. Jul 1942.  
52p diagrs, tables. MI \$.100 Ph \$4.00.
- OSRD 818 FBL 27286 (2-609)  
Sage, B. H., and others  
Pressure distribution along radially burning propellant grains. Progress report. Aug 1942.  
29p graphs. MI \$.100 Ph \$2.00.
- OSRD 819 PBA 31199 (2-940)  
Bachmann, W. E.  
Edna and related compounds. Final report. Sept 15, 1941-Aug 15, 1942. Aug 1942.  
22p MI \$.100 Ph \$2.00.
- OSRD 820 PBL 34798 (3-81)  
Bachmann, W. E.  
Studies on the preparation and properties of RDX. Progress report. Aug 1942.  
42p graphs, tables. MI \$.100 Ph \$3.00.
- OSRD 821 PBL 51010 (4-788)  
Kramer, R. L.  
The effect of solid lubricant on bullet penetration. (Bound with Tests of plastic armor, received from the National Research Council of Canada, By R. J. Emrich and R. A. Beth). Aug 1942.  
10p table, photos. MI \$.100 Ph \$1.00.
- OSRD 822 PBL 19818 (I-1576)  
Chipman, John, and others  
Non-magnetic steels for armor plate (AC-6). Final report, Jul 31, 1942. Aug 1942.  
104p graphs, photos, tables. MI \$.150 Ph \$7.00.
- OSRD 824 PBA 5588 (I-477)  
Fusion, R. C.  
A study on the precipitation of the amyldichloroarsonines, to July 4, 1942. 1942.  
10p Ph \$.100 MI \$.50.
- OSRD 825 PBL 5585 (I-1246)  
Bartlett, Paul D.  
The corrosion of steel by 50% HS-50% H-I mixture. Report to Jun 13, 1942. Aug 1942.  
15p graphs, tables. MI \$.50 Ph \$.100.
- OSRD 826 PBL 22844 (2-134)  
Griffin, D. R., and others  
Acoustic design of earphone sockets for helmets and headsets. Aug 1942.  
27p photos, drawings. MI \$.50 Ph \$2.00.
- OSRD 827 PBL 31120 (2-797)  
Mason, W. P., and McSkimin, H. J.  
Measurements of the velocity and impedance of six oils. Aug 1942.  
10p diagrs, graphs. MI \$.100 Ph \$.100.
- OSRD 829 PBL 31115 (2-872)  
Braham, F. H.  
Measurements of sound transmission through single and double plates. Aug 1942.  
7p tables, curves, drawings. MI \$.100 Ph \$.100.
- OSRD 831 PBL 5587 (I-481)  
Shriner, R. L.  
Report on "Synthesis of compounds related to urushiol, laccol, renghol, and titicol," to May 15, 1942. 1942.  
20p Ph \$.200 MI \$.50.
- OSRD 834 PBA 50811 (5-473)  
Bartlett, Paul D.  
The reaction of H-I (Lewisite) with amines. The preparation of H-I diethoxide (diethoxy-B-
- chlorovinyl-arsine). Progress report to Jun 12, 1942. Aug 1942.  
6p MI \$.100 Ph \$.100.
- OSRD 835 PBL 5586 (I-1246)  
Bartlett, Paul D.  
The corrosion of steel by 50% HS (TG) H-I (HgCl<sub>2</sub>) mixture. Report to Aug 6, 1942. Aug 1942.  
8p graph. MI \$.50 Ph \$1.00.
- OSRD 836 PBL 34799 (2-940)  
Bartlett, Paul D.  
Reaction of HS (mustard) with thiourea, sodium ethylxanthate and disodium ethylene dimercaptoide. Progress report, Jun 10, 1942. Aug 1942.  
5p MI \$.100 Ph \$1.00.
- OSRD 837 PBA 5563 (I-539)  
Hamilton, C. S.  
Report on "Aliphatic dichloroarsonines," to July 25, 1942. 1942.  
42p Ph \$3.00 MI \$.50.
- OSRD 840 PBA 5580 (I-480)  
Marvel, C. S., and Fusion, R. C.  
Report on "The preparation of mustard gas and certain of its derivatives and analogs" to Aug 15, 1942. 1942.  
17p Ph \$2.00 MI \$.50.
- OSRD 841 PBL 20840 (I-1348)  
Lovell, Stanley, P.  
Report on substitution of non-critical materials for brass in miscellaneous hardware. Aug 1942.  
3p MI \$.50 Ph \$.100.
- OSRD 845 PBL 31109 (2-796)  
Iselin, C. O., and Woodcock, A. H.  
Preliminary report on the prediction of "afternoon effect." Jul 1942.  
10p curves, tables. MI \$.100 Ph \$3.00.
- OSRD 847 PBA 5591 (I-477)  
Fusion, R. C.  
Report on "Acetophenone derivatives," to July 15, 1942. 1942.  
16p Ph \$.200 MI \$.50.
- OSRD 852 PBA 5589 (I-477)  
Drake, Nathan L.  
Report on "The preparation of diethyl zinc." 23p Ph \$2.00 MI \$.50.
- OSRD 854 PBM 5593 (I-454)  
Bell, E. M. K., and others  
Report on "A new apparatus for exposure of small animals to volatile toxic agents (Monash Machine)," to Aug 26, 1942.  
22p illus. Ph \$.200 MI \$.50.
- OSRD 855 PBL 5592 (I-682)  
Marvel, C. S., and Fusion, R. C.  
"The corrosion of metals by mustard gas." Aug 1942.  
43p illus. MI \$.50 Ph \$3.00.
- OSRD 856 PBA 5595 (I-478)  
Bartlett, Paul D.  
Report on "The reactions of n-amyl, and n-hexyldichloroarsonines in comparison with Lewisite," to Aug 19, 1942. 1942.  
6p MI \$.50 Ph \$.100.

## Bibliography

- OSRD 858 PBA 5594 (I-473)  
Coleman, George H.  
Report on "Nitrogen trichloride studies" to  
August 1, 1942. 1942.  
8p Ph \$1.00 Mi \$.50.
- OSRD 864 PBA 5554 (I-533)  
Northrop, John H.  
Progress report on "Titration of HS, Q. T.  
M-I, ED and PDA with hypochlorite and methyl  
red," to August 25, 1942. 1942.  
5p Ph \$1.00 Mi \$.50.
- OSRD 867 PBA 5597 (I-1142)  
Klatikowsky, G. B.  
"Preparation of Radioactive Lewisite" Report  
to Jul 15, 1942. Aug 1942.  
5p Mi \$.50 Ph \$1.00.
- OSRD 868 PBA 50814 (S-474)  
Geiling, E. M. K.  
Toxicity and vesicant action of various  
organic tin compounds. Progress report to  
August 27, 1942. Sep 1942.  
8p tables. Mi \$1.00 Ph \$1.00.
- OSRD 871 PBA 5596 (I-436)  
Gelman, Henry  
Report on "Preparation of triethylboron to  
be used generally in incendiaries and for igni-  
tion of oil on water," to June 12, 1942. 1942.  
18p Ph \$2.00 Mi \$.50.
- OSRD 873 PBL 23892 (2-245)  
Frazer, J. C. W., and Horn, F. Hubbard  
Interaction of carbon monoxide iron. Prog-  
ress report. Sep 1942.  
13p graph, table. Mi \$.50 Ph \$1.00.
- OSRD 875 PBL 24895 (2-318)  
Marvel, C. S.  
Explosive polymers. Progress report. Sep  
1942.  
9p Mi \$.50 Ph \$1.00.
- OSRD 876 PBL 9392 (I-760)  
Dodge, Barnett F.  
Report on "Rectification of air in a two-  
inch packed column," to August 6, 1942. Aug  
1942.  
49p illus. Mi \$.50 Ph \$4.00.
- OSRD 877 PBL 23773 (2-227)  
Barnaby, H. S.  
The design and testing of a centrifugal air  
cleaner. Jul 1942.  
5ip diagrs, graphs, photos. Mi \$1.00  
Ph \$.00.
- OSRD 880 PBL 6577 (I-636)  
Northrop, John H.  
Report on "Photoelectric cell for recording  
the presence of HS or other gases in air" to  
September 10, 1942. 1942.  
12p Ph \$1.00 Mi \$.50.
- OSRD 881 PBL 5499 (I-408)  
Weith, A. J., and Turkington, V. H.  
Report on "Protective coatings for ship  
bottoms." 1942.  
20p illus. Mi \$.50 Ph \$2.00.
- OSRD 886 PBL 16489 (I-1316)  
Sinclair, George  
Antenna Patterns for Aircraft. Covering  
studies and experimental investigations in con-  
nection with antenna Patterns for aircraft.  
Aug 1942.
- 75p photos, graphs, diagrs. Mi \$1.00  
Ph \$.50.
- OSRD 889 PBL 19786 (I-1240)  
Davis, Mallowell, and others  
Physiological effects of exposure to certain  
sounds: Final report. Jul 1942.  
82p graphs, tables. Mi \$.100 Ph \$.00.
- OSRD 890 PBL 20267 (2-175)  
Dushman, Saul  
Report of work on slow phosphors for radar  
Indicator screens. Progress report. May 1942.  
47p curves. Mi \$.50 Ph \$4.00.
- OSRD 891 PBL 32564 (3-87)  
Leverenz, H. W.  
Summary of RCA research on radar indicator  
screens, Jan 1941 to Mar 1942. (RCA Manufactur-  
ing Co., Harrison, N. J.) Apr 1942.  
58p graphs, tables. Mi \$2.00 Ph \$4.00.
- OSRD 893 PBL 6578 (I-559)  
Geiling, E. M. K., and McLean, Franklin C.  
Report on "Techniques employed in toxicity  
determinations at the University of Chicago  
Toxicity Laboratory." 1942.  
70p illus. Ph \$5.00 Mi \$1.00.
- OSRD 894 PBL 23786 (2-83)  
National Research Corporation  
Fogging of vision devices under flight  
conditions. n.d.  
9p graphs. Mi \$.50 Ph \$1.00.
- OSRD 895-24 PBL 14292 (I-1168)  
Wehner, R. S.  
Broad-band inverted-L antenna. Jul 1944.  
14p Mi \$.50 Ph \$1.00.
- OSRD 895-25 PBL 14302 (I-994)  
Atwood, J. B., and Hansell, G.E.  
Pulse amplitude selective AGC circuit.  
Jul 1944.  
10p diagrs. Mi \$.50 Ph \$1.00.
- OSRD 895-29 PBL 14305 (I-1168)  
Wehner, R. S.  
Antenna for horizontal polarization at UHF.  
Oct 1944.  
12p charts, drawing. Mi \$.50 Ph \$1.00.
- OSRD 895-32 PBL 14307 (I-1000)  
Lindenblad, N. E.  
A flush surface antenna of the slot-cavity  
type having wide band characteristics. Mar  
1945.  
8p graphs, photos. Mi \$.50 Ph \$1.00.
- OSRD 898 PBA 31087 (2-945)  
Williams, J. W.  
Mechanism of gelatinization and solution of  
fibrous nitrocellulose in non-aqueous solvents.  
Progress report. Sep 1942.  
21p Mi \$.100 Ph \$2.00.
- OSRD 899 PBA 5568 (I-478)  
Kharasch, M. S.  
Report on "catalytic conversion of diphos-  
gene to phosgene within closed heavy metal  
containers," to September 10, 1942. 1942.  
20p Ph \$2.00 Mi \$.50.
- OSRD 901 PBL 22845 (2-86)  
Egan, J. P., and others  
Performance of communication equipment in  
noise. Oct 1942.  
134p graphs. Mi \$.150 Ph \$9.00.
- OSRD 905 PBL 31088 (2-528)  
Brinkley, Stuart R., Jr., and  
Wilson, E. Bright, Jr.  
Revised method of predicting the detonation  
velocities in solid explosives. Progress re-  
port. Sep 1942.  
65p tables. Mi \$2.00 Ph \$5.00.
- OSRD 906 PBA 63647 (5-475)  
McReynolds, d. P.  
Mercuric iodide as a reagent for detecting HS  
and insoluble chromates as reagents for detec-  
ting M-I. Sep 1942.  
8p tables. Mi \$.100 Ph \$1.00.
- OSRD 907 PBL 31085 (2-941)  
Elderfield, R. C.  
Explosives from hydroxy and amino compounds.  
Progress report. Sep 1942.  
24p Mi \$.100 Ph \$2.00.
- OSRD 910 PBL 20275 (2-122)  
Bohenblust, H. F.  
Propagation of plastic waves, a comparison  
of reports NDRC A-29 and R. C. 329. Sep 1942.  
6p Mi \$.50 Ph \$1.00.
- OSRD 915 PBL 31089 (2-626)  
Johnson, John R.  
Studies relating to aliphatic nitramines.  
Progress report, Sep 15, 1942. Oct 1942.  
36p Mi \$.100 Ph \$3.00.
- OSRD 916 PBL 20841 (I-1325)  
Hart, W. B.  
Report on confining and collecting petro-  
leum products from spills or leaks to water-  
ways. Sep 1942.  
35p sketches. Mi \$.50 Ph \$3.00.
- OSRD 918 PBL 15876 (I-1109)  
Chapman, E. C.  
Progress report on development of armor  
welding electrodes; tests on Coast Metals, Inc.  
electrodes. Oct 1942.  
11p photos. Mi \$.50 Ph \$1.00.
- OSRD 919 PBL 31206 (2-652)  
Bridgman, P. W.  
Plastic deformation of steel under high  
pressure. Progress report. Sep 1942.  
40p tables, photos, graphs. Mi \$.100.  
Ph \$.300.
- OSRD 921 PBA 9385 (I-603)  
Calvin, Melvin  
Report on "Chelate oxygen compounds and  
equipment for their use," to August 1, 1942.  
1942.  
47p Mi \$.50 Ph \$4.00.
- OSRD 922 PBL 23786 (2-70)  
Ford Motor Company  
Amphibious reconnaissance car 1/4-ton 4x4  
model: Specifications. Aug 1942.  
36p drawing. Mi \$.50 Ph \$3.00.
- OSRD 923 PBL 51005 (4-871)  
U. S. National Defense Research Committee  
The chromatic dispersion of the human eye  
and its possible influence on stereoscopic  
range finding. Report to the Services No. 85.  
Oct 1942.  
33p diagrs, drawings, tables. Mi \$.100  
Ph \$.300.

## Bibliography

- OSRD 925 PBL 24893 (2-212)  
Ewell, R. H.  
Theory and tactics of incendiary bombing. Oct 1942.  
31p chart, diagr, tables. MI \$.50 Ph \$3.00.
- OSRD 927 PBL 50854 (4-292)  
Emrich, R. J., and Deissman, L. A.  
Short base line projectile velocity measurements. Progress report. Oct 1942.  
35p diagrs, drawing, photos, table.  
MI \$1.00 Ph \$3.00.
- OSRD 929 PBL 23679 (2-355)  
Golden, S.  
Pressure relationships holding within small rockets. Progress report. Sep 1942.  
28p photos, graphs, tables, sketches.  
MI \$.50 Ph \$2.00.
- OSRD 930 PBL 34132 (2-988)  
U. S. National Defense Research Committee  
Part I. The influence of atmospheric scattering in range finding. Part II. Effect of atmospheric scattering upon the appearance of a dark object. Oct 1942.  
123p diagrs, graphs. MI \$3.00 Ph \$9.00.
- OSRD 931 PBL 20274 (2-123)  
Duwez, Pol E., and others  
The propagation of plastic strain in tension. Progress report. Oct 1942.  
90p curves, photos. MI \$1.00 Ph \$6.00.
- OSRD 932 PBL 23785 (2-109)  
National Research Corporation  
Air conditioning as a means of eliminating fog and frost formation on glass surfaces in optical instruments. Oct 1942.  
4p MI \$.50 Ph \$1.00.
- OSRD 933 PBL 5559 (I-537)  
Carmack, Marvin, and Hendrick, Richard  
Report on "The by-products of commercial mustard gas made from ethylene and the sulfur chlorides," to Sept. 15, 1942. 1942.  
32p Ph \$3.00 MI \$.50.
- OSRD 935 PBL 27421 (2-553)  
Hirschfelder, J. O., and Sherman, Jack  
Simple calculation of thermochemical properties for use in ballistics. Progress report. Oct 1942.  
21p MI \$1.00 Ph \$2.00.
- OSRD 935, Addenda PBL 27421s (5-95)  
Hirschfelder, J. O., and Sherman, Jack  
Simple calculation of thermochemical properties for use in ballistics. Mar 1943.  
21p tables. MI \$1.00 Ph \$2.00.  
Addenda to PB 27421.
- OSRD 939 PBL 39578 (3-480)  
Cross, Howard C.  
Heat resisting metals for gas turbine parts N-102. Progress report, Sep 1942. Oct 1942.  
34p graphs, tables. MI \$1.00 Ph \$3.00.  
See also PB 29579.
- OSRD 940 PBL 8080 (I-801)  
Rodebush, W. H., and others  
Report on "screening smokes." Oct 1942.  
183p illus. MI \$2.00 Ph \$13.00.
- OSRD 941 PBL 5556 (I-560)  
Moller, Carl R.
- Report on "The stimulatory properties of certain organic compounds," to September 20, 1942. 1942.  
44p Ph \$3.00 MI \$.50.
- OSRD 942 PBA 5557 (I-537)  
Bartlett, Paul D.  
Report on "The beta-chloroethylamines: Kinetics of displacement, hydrolysis, and dimerization of beta-chloroethylidioethylamine, methyl-beta-chloroethylamine, and tri-beta-chloroethylamine and their similarity to the reactions of MS," to September 18, 1942. 1942.  
32p Ph \$3.00 MI \$.50.
- OSRD 943 PBL 27288 (2-743)  
Gibson, R. E.  
The rate of burning of double-base powders and the possible effects of change in nitro-glycerin and total-volatiles content on the burning of jet propulsion tube powder. Progress report. Oct 1942.  
18p graphs. MI \$1.00 Ph \$2.00.
- OSRD 944 PBL 5558 (I-537)  
Bushnell, A. M.  
Report on "Analysis and treatment of water," to August 31, 1942. 1942.  
13p Ph \$1.00 MI \$.50.
- OSRD 945 PBA 9386 (I-780)  
Diehl, Harvey  
Development of "oxygen-carrying compounds," to Sep 1, 1942. 1942.  
95p illus. MI \$1.00 Ph \$7.00.
- OSRD 946 PBL 18477 (I-1443)  
Karman, Th. von, and others  
The propagation of plastic waves in tension specimens of finite length, theory and methods of integration. Oct 1942.  
41p MI \$.50 Ph \$3.00.
- OSRD 947 PBL 27283 (2-659)  
Lacey, W. N., and Sage, B. H.  
Some physical properties of ballistite. Progress report, Dec 27, 1941. Oct 1942.  
29p photo, graphs, tables.  
MI \$1.00 Ph \$2.00.
- OSRD 962 PBL 22846 (I-1800)  
Caywood, T. E., and Beranek, L. L.  
Acoustical considerations in the design of an oxygen mask. Oct 1942.  
33p photos, curves. MI \$.50 Ph \$3.00.
- OSRD 953 PBL 16761 (I-1113)  
Tucker, C. W., and Anderson, H. V.  
X-ray measurement of residual stresses in cold drawn non-ferrous alloys (00-25) Progress report: Jun 15-Oct 15, 1942. Oct 1942.  
28p photos, diagrs, tube. MI \$.50 Ph \$2.00.
- OSRD 955 PBL 31121 (3-97)  
Bell Telephone Laboratories, New York City  
A standard crystal hydrophone. Oct 1942.  
78p photos, curves, diagrs, drawings.  
MI \$2.00 Ph \$6.00.
- OSRD 958 PBA 63646 (5-480)  
Lewis, Clay  
Activation of gas charcoal by a new jiggler process. Jul 1942.  
158p diagrs, graphs, tables.  
MI \$4.00 Ph \$11.00.
- OSRD 957 PBL 20273 (2-123)  
Duwez, Pol E., and others  
The influence of specimen length on strain propagation in tension. Progress report. Oct 1942.  
39p graphs. MI \$.50 Ph \$3.00.
- OSRD 959 PBL 23762 (2-65)  
Lewis, Herbert B.  
Aircraft brakes. Progress report. Sep 1942.  
4p MI \$.50 Ph \$1.00.
- OSRD 960 PBL 23784 (2-247)  
National Research Corp., Boston  
Rain-repellent coatings as an aid to visibility through vision devices. n.d.  
10p photos. MI \$.50 Ph \$1.00.
- OSRD 966-41 PBL 14317 (I-1057)  
Heinzlman, G. J., and Lindner, J. L.  
Jamming susceptibility of the Japanese model 99 type MI 3 radio set. Nov 1944.  
6p diagrs. MI \$.50 Ph \$1.00.
- OSRD 968 PBL 23208 (2-72)  
Eastes, J. W., and Mueller, E. R.  
Desalting of sea water (NL-85). Final report, May 1, 1942. Oct 1942.  
15p MI \$.50 Ph \$1.00.
- OSRD 969 PBL 5858 (I-450)  
Rudemose, H. Wayne, and others  
Design of an automatic octave-sound analyzer and recorder. 1942.  
73p illus. Ph \$5.00 MI \$1.00.
- OSRD 970 PBL 16443 (I-1876)  
Pierce, W. C.  
A summary of Tests on Soda Lime. Oct 1942.  
10p tables. MI \$.50 Ph \$1.00.  
See PB 15441 for earlier progress report.
- OSRD 973 PBL 40548 (3-413)  
Archer, Robert S., and others  
Boron in steel. Final report, Sep 1942. Nov 1942.  
21p MI \$1.00 Ph \$2.00.
- OSRD 975 PBL 50813 (4-524)  
Lovell, S. P., and Lehmberg, W. H.  
Collapsible canteen: Material and construction. Oct 1942.  
3p MI \$1.00 Ph \$1.00.
- OSRD 978 PBL 31116 (2-951) (3-53)  
Pekeris, C. L.  
The rate of rise and diffusion of air bubbles in water. Oct 1942.  
29p tables, curves, charts.  
MI \$1.00 Ph \$2.00.
- OSRD 980 PBL 8081 (I-794)  
Brown, George, and others  
Report on "The mechanical formation of screening smokes using salt solution." Oct 1942.  
62p illus. MI \$1.00 Ph \$5.00.
- OSRD 983 PBL 4188 (I-321)  
Standard Oil Development Co.  
Development of flame throwers, modification of portable flame thrower for thickened fuels. First progress report, 1942.  
30p MI \$.50 Ph \$3.00.

## Bibliography

- OSRD 987 PBL 19785 (2-55)  
Harvard University Psycho-Acoustic Laboratory  
The problem of selecting and training personnel for communication in intense noise. Nov 1942.  
24p graphs, tables. MI \$.50 Ph \$2.00.
- OSRD 988 PBL 20272 (2-123)  
Dunetz, Pol E., and others  
The effect of stopped impact and reflection on the propagation of plastic strain in tension. Progress report. Nov 1942.  
10p curves. MI \$.50 Ph \$2.00.
- OSRD 989 PBL 34133 (2-824)  
U. S. National Defense Research Committee  
The Eastman trainer for rangefinder observers. Oct 1942.  
70p graphs, charts, photos.  
MI \$.20 Ph \$.50.
- OSRD 991 PBA 5571 (I-478)  
Hamilton, C. S.  
Annual report on organic arsenicals. 1942.  
76p Ph \$.60 MI \$.10.
- OSRD 994 PBL 34143 (3-50)  
U. S. National Defense Research Committee and others.  
Temperature effects in stereoscopic height finders. Report to the services No. 38: Section D-2, Fire Control. Oct 1942.  
157p drawings, curves, diagrams, graphs.  
MI \$.40 Ph \$1.00.
- OSRD 995 PBL 34142 (3-124)  
U. S. National Defense Research Committee  
Orthopseudoscopic rangefinder. Report to the services No. 43: Section D-2, Fire Control. Oct 1942.  
107p diagrs, curves, tables.  
MI \$.30 Ph \$.80.  
Includes Princeton University Fire Control Research report No. 10, Vol. 2, PB 34136
- OSRD 997 PBL 31103 (2-785)  
Long, F. A., and others  
The efficiencies of various substances in promoting the gelatinization of nitrocellulose in 2:1 ether ethanol. Progress report, Sep 15, 1942. Nov 1942.  
68p curves, tables. MI \$.20 Ph \$.50.
- OSRD 998 PBA 16444 (I-1376)  
Blacet, F. E., and Johnstone, H. F.  
The penetration and persistence of carbon dioxide when released in an enclosed court. Oct 1942.  
16p diagrs, photos. MI \$.50 Ph \$2.00.
- OSRD 999 PBL 27284 (2-809)  
Sage, B. H.  
Comparative behavior of ballistite from Kenil and Redford. Progress report. Nov 1942.  
17p curves, diagrs, photos.  
MI \$.10 Ph \$.20.
- OSRD 1001 PBL 51008 (4-878)  
U. S. National Defense Research Committee  
The effects of loud sounds on the accuracy of azimuth tracking and of stereoscopic range finding. (Report to the Services No. 37.) Nov 1942.  
3p MI \$.10 Ph \$.10.
- OSRD 1002 PBA 50812 (5-383)  
McCabe, M. L.
- Investigation in connection with the preparation of wood charcoal suitable for activation. Annual formal report, Sep 1, 1941-Aug 31, 1942. Oct 1942.  
44p graphs, drawings, tables.  
MI \$.10 Ph \$3.00.
- OSRD 1003 PBL 33187 (2-879)  
Hansen, Robert J.  
Construction of resistance strain gages. Nov 1942.  
8p photo, diagr. MI \$.10 Ph \$.10.  
See also PB 18478.
- OSRD 1005 PBL 23763 (2-70)  
Yellow Truck and Coach Manufacturing Co., General Motors Truck and Coach Div., Pontiac, Mich.  
Model—DUKW 353. Oct 1942.  
71p drawings, photos. MI \$.10 Ph \$.50.
- OSRD 1006 PBA 23216 (2-71)  
Dow, R. P., and others  
Annotated bibliography and subject index on shipbottom-fouling organisms and anti-fouling research. Sep. 1942.
- | Pages    | Microfilm | Photostat |         |
|----------|-----------|-----------|---------|
| PB 23215 | 336p      | \$3.50    | \$23.00 |
| PB 23216 | 174p      | \$2.00    | \$12.00 |
| PB 23217 | 197p      | \$2.00    | \$14.00 |
- OSRD 1009 PBL 15880 (I-940)  
Mehl, Robert F., and Wells, Cyril  
Steel for gun tubes; Final report, Part I. The Significance of angular fractures. Nov 1942.  
47p photos, drawings, graphs.  
MI \$.50 Ph \$4.00.
- OSRD 1011 PBL 8318 (I-804)  
Dodge, Barnett F.  
Report on "Preliminary results of tests on regenerators" to August 1, 1942. 1942.  
39p illus. MI \$.50 Ph \$.30.
- OSRD 1014 PBL 27289 (2-744)  
Osborne, D. W., and others  
Thermodynamic properties of special double-base powders. Progress report. Oct 1942.  
123p tables, biblio. MI \$.30 Ph \$.90.
- OSRD 1015 PBA 6572 (I-1337)  
DuPont de Nemours and Co., Inc., E. I.  
Report on Corneal cloudiness from dimethyl diglycolate and related compounds to Oct 1, 1942. Nov 1942.  
10p photos. MI \$.50 Ph \$.10.
- OSRD 1017 PBA 5573 (I-536)  
Adkins, Homer  
Report on "M-vanillylundecylamide and N-vanillyl-imandelamide" to November 1, 1942.  
1942.  
21p Ph \$.20 MI \$.50.
- OSRD 1018 PBL 8316 (I-603)  
Calvin, Melvin, and others  
Chelate oxygen compounds and the mechanism of the absorption reaction. 1942.  
67p illus. MI \$.10 Ph \$.50.
- OSRD 1024 PBL 23761 (2-70)  
Putnam, P. C.  
Development of wassel, with notes on problems of its use. Interim report. Nov 1942.  
79p charts, graphs, photos.  
MI \$.10 Ph \$.60.
- OSRD 1024-32 PBL 14357 (I-1300)  
Hoffmann, Paul F.  
Vulnerability study of Japanese Model B radio set. Sep 1945.  
2p MI \$.50 Ph \$.10.
- OSRD 1026 PBL 19660 (I-1296)  
Thimann, Kenneth A., and Kaufman, David  
Report on the preparation and properties of chlorophyll paints. Oct 1942.  
42p graph, table. MI \$.50 Ph \$.30.
- OSRD 1030 PBL 32185 (2-826)  
Kirkwood, John G., and others  
The pressure wave produced by an underwater explosion: Part IV. Progress report, Sep 30, 1942. Nov 1942.  
28p curves. MI \$.10 Ph \$.20.
- OSRD 1035 PBL 32191 (2-827)  
MacDougall, D. P.  
Underwater explosives research. First progress report. Nov 1942.  
31p curves, diagrs, photos.  
MI \$.10 Ph \$.30.
- OSRD 1039 PBL 39715 (3-748)  
Davidson, Kenneth S. M., and Drisko, John B.  
The No. 2 tank for maneuvering tests. Nov 1942.  
14p photos, drawings. MI \$.10 Ph \$.10.
- OSRD 1040 PBL 40699 (3-921)  
McMillan, Edwin M., and others  
Echo repeater target, surface model RR-1. Nov 1942.  
21p photos, drawings, diagrs, curves.  
MI \$.10 Ph \$.20.
- OSRD 1046 PBA 5572 (I-478)  
Bent, H. E.  
Report on "Volatility of certain arsenic and nitrogen compounds" to August 1, 1942.  
1942.  
24p illus. Ph \$.20 MI \$.50.
- OSRD 1058 PBA 6573 (I-593)  
McReynolds, J. P.  
Report on "An investigation of the products formed in the pyrolysis and combustion of mustard gas from the standpoint of its detection" to November 5, 1942. 1942.  
11p MI \$.50 Ph \$.10.
- OSRD 1059 PBA 5574 (I-587)  
Bent, H. E.  
Report on "The vapor pressure of HS and diphenyl ether and solutions of these compounds" to July 31, 1942. 1942.  
15p illus. MI \$.50 Ph \$.10.
- OSRD 1060 PBA 5575 (I-470)  
Gasser, H. S.  
Report on "Biological methods for determination of M-I and DH in solutions and in air," to September 1, 1942. 1942.  
55p illus. Ph \$.40 MI \$.10.
- OSRD 1062 PBA 6574 (I-437)  
Bent, H. E.  
Report on "Volatility of Lovenstein Mustard." 9p MI \$.50 Ph \$.10.
- OSRD 1065 PBL 15862 (I-1348)  
Lorig, C. K.  
The effects of hydrogen, nitrogen, and oxygen in armor plate: Literature survey OD-38-2. Progress report, Oct 24, 1942. Nov 1942.  
93p graphs, photos. MI \$.10 Ph \$.20.

## Bibliography

13

- OSRD 1069 PBL 27287 (2-837)  
Sage, B. H.  
Some studies of the internal ballistics of jet-propelled devices. Progress report, Nov 1942.  
57p graphs. MI \$2.00 Ph \$4.00.
- OSRD 1075 PBA 5576 (I-1142)  
Bartlett, Paul D.  
"The production of Lewisite by the mercuric chloride process: Investigation of the effects of impurities in arsenic trichloride." Report to Nov. 15, 1942. Dec 1942.  
18p tables, graph. MI \$.50 Ph \$1.00.
- OSRD 1078 PBL 31117 (3-86)  
Graham, F. M., and Dietze, E.  
Mutual impedance analysis of underwater-sound devices. Dec 1942.  
12p curves, diagrs. MI \$1.00 Ph \$1.00.
- OSRD 1079 PBL 23678 (1079)  
Haas, Leo, Jr.  
Rockets for assisted take-off of airplanes; their use and the prevention of blast injury to the airplane. Progress report, Dec 1942.  
23p photos, diagrs, graphs, tables. MI \$.50 Ph \$2.00.
- OSRD 1086 PBL 31118 (3-86)  
Dietze, E.  
The relation between the absolute efficiency of a hydrophone and its thermal noise level. Dec 1942.  
8p MI \$1.00 Ph \$1.00.
- OSRD 1087 PBL 28531 (2-748)  
Hirschfelder, J. O., and others  
Thermodynamic properties of propellant gases. Progress report, Nov 1942.  
146p diagrs, tables, graphs. MI \$3.00 Ph \$10.00.  
An extension and revision of NDRC report No. A-48 (OSRD No. 547, PB 23693).
- OSRD 1088 PBL 16483 (I-1245)  
Anderson, E. A., and others  
Prevention of stress corrosion cracking of cartridge brass (00-26): Progress report, Aug 15-Nov 15, 1942. Dec 1942.  
37p photos, diagrs, tables. MI \$.50 Ph \$3.00.
- OSRD 1093 PBL 31122 (2-797)  
Nyquist, Harry  
Directivity of sound in water—Elementary arrays. Jun 1942.  
10p curves. MI \$1.00 Ph \$3.00.
- OSRD 1094 PBA 5577 (I-528)  
Doering, M. E., and others  
Report on "Reactions of the chlorine atoms of mustard gas in aqueous media." 1942.  
33p Ph \$3.00 MI \$.50.
- OSRD 1097 PBL 51007 (5-196)  
U. S. National Defense Research Committee  
Stereo and vernier acuity as affected by metrazol, loss of sleep, benzedrine, variations in the blood sugar, and hyperventilation. (Report to the Services No. 44) Nov 1942.  
16p graphs, tables. MI \$1.00 Ph \$2.00.
- OSRD 1099 PBL 18512 (I-1577)  
Dorn, John E.  
Properties and heat treatment of magnesium alloys. Progress report, Nov 7, 1942. Dec 1942.
- 66p photos, drawings, tables. MI \$1.00 Ph \$5.00.
- OSRD 1101 PBL 20258 (2-117)  
Jones and Lamson Machine Co., and Bryant Chucking Grinder Co., Springfield, Vt.  
Screw threads, a bibliography of available material on screw thread theory, standards, production methods and gaging methods. Summary report. 1942.  
469p MI \$5.00 Ph \$33.00.
- OSRD 1104 PBL 63629 (5-308)  
Karush, W., and Critchfield, C. L.  
Drag coefficient for a cone moving with high velocity. Dec 1942.  
21p graphs, tables. MI \$1.00 Ph \$2.00.
- OSRD 1105 PBL 18479 (I-1275)  
Richart, F. E., and Newark, M. M.  
Impact tests of reinforced concrete beams. Dec 1942.  
34p photos, graphs, charts. MI \$.50 Ph \$3.00.
- OSRD 1110 PBL 15888 (I-1345)  
Dean, G. E., and others  
Progress report on Evaluation of weldability by direct welding tests. 00-37-1. Progress report, Dec 14, 1942. Dec 1942.  
116p graphs, tables. MI \$1.50 Ph \$8.00.
- OSRD 1111 PBA 6575 (I-538)  
Dupont De Nemours, E. I., and Co.  
Preparation of BAL, report to December 1, 1942.  
37p MI \$.50 Ph \$3.00.
- OSRD 1112 PBL 34134 (2-825)  
U. S. National Defense Research Committee  
Field tests of Eastman Kodak 15° and Polaroid 43° base rangefinders. Dec 1942.  
20p graphs. MI \$1.00 Ph \$2.00.
- OSRD 1113 PBL 28770 (2-155)  
Carver, E. K., and Broughton, G.  
Rheological properties of thickened liquids. First report, Jun 5, 1942-Dec 1, 1942. Dec 1942.  
80p drawings, graphs, tables, photos. MI \$1.00 Ph \$6.00.
- OSRD 1115 PBL 32181 (2-825)  
Kirkwood, John G.  
The plastic deformation of marine structures by an underwater explosion wave. Part II. Progress report, to Nov 15, 1942. Dec 1942.  
23p MI \$1.00 Ph \$2.00  
See also PB 82195.
- OSRD 1120 PBL 21129 (I-1602)  
O'Brien, Morrough P.  
The removal of oil from harbor waters by means of chemically treated sand: Final report. Nov 30, 1942. Jan 1943.  
112p drawings, diagrs, graphs, photos. MI \$1.50 Ph \$8.00.
- OSRD 1123 PBL 4651 (I-370)  
Thompson, Norman J., and Blair, Edwin A.  
Development of incendiary mixtures. 1943.  
21p illus. Ph \$2.00 MI \$.50.
- OSRD 1126 PBL 16440 (I-985)  
Blacet, F. E.  
Experiments with type as Whetlerites at Fostoria, Columbus and Zanesville, Ohio. Dec 1942.  
18p MI \$.50 Ph \$2.00.
- OSRD 1128 PBL 34131 (3-48)  
U. S. National Defense Research Committee, and Flood, Merrill H.  
Perspective effects in stereoscopic range finders. Report to the services No. 40: Sect. D-2, Fire control. Dec. 1942.  
92p tables, diagrs, charts, curves. MI \$2.00 Ph \$7.00.  
See also PB-34136 and 34137.
- OSRD 1137 PBL 19815 (I-1524)  
Lewis, Dartrey  
Corrosion fatigue failure of aircraft control cables (I-10): Effect of lubrication on fatigue properties. Progress report I, Dec 11, 1942. Jan 1943.  
40p graphs. MI \$.50 Ph \$3.00.
- OSRD 1138 PBL 20839 (2-72)  
Kehoe, Robert A., and Cholak, J.  
Methods for the purification of water after its transportation and storage in cans, drums and tanks that have been employed as containers for leaded gasoline. Final report. Dec 1942.  
37p MI \$.50 Ph \$3.00.
- OSRD 1140 PBL 32719 (3-275)  
Neumann, John von  
Theory of shock waves. Progress report, Aug 31, 1942. Jan 1943.  
29p MI \$1.00 Ph \$2.00.
- OSRD 1146 PBL 19522 (I-1579)  
Russell, H. W.  
Fatigue properties of magnesium alloys and structures: Fatigue properties of magnesium alloy sheet. Progress report, Dec 7, 1942. Jan 1943.  
36p photos, diagrs, curves. MI \$.50 Ph \$3.00.
- OSRD 1147 PBL 16754 (I-1411)  
Schuh, A. E., and Boyles, Alfred  
Improvements in and extension of centrifugal casting methods for production of miscellaneous war materiel items. Progress report, Nov 30, 1942. Jan 1943.  
33p photos, tables. MI \$.50 Ph \$3.00.
- OSRD 1150 PBA 5578 (I-479)  
Hill, G. Albert  
Report on "The synthesis of compounds related to Urushiol." November 1, 1942. 1942.  
11p Ph \$1.00 MI \$.50.
- OSRD 1154 PBA 18870 (2-244)  
Elderfield, R. C., and Hammatt, L. P.  
Kinetic studies on the nitration process: Progress report, Sep 30, 1942. Jan 1943.  
8p MI \$.50 Ph \$1.00.
- OSRD 1155 PBL 19551 (I-1413)  
Thompson, J. G., and others  
Beryllium-aluminum alloys for engine parts. Progress report, Dec 22, 1942. Jan 1943.  
25p MI \$.50 Ph \$2.00.
- OSRD 1157 PBL 27350 (2-576)  
Strong, J. D., and others  
Far infrared detecting devices. First progress report. Dec 1942.  
94p photos, graphs, diagrs, drawings. MI \$2.00 Ph \$7.00.

## Bibliography

- OSRD 1160 PBL 28599 (2-358)  
Harrison, George R.  
Conference on new optical materials, instruments, and methods: National Defense Research Committee. Oct 1942.  
74p drawings. MI \$2.00 Ph \$5.00.
- OSRD 1162 PBL 23775 (2-127)  
U. S. National Research Council, War Metallurgy Committee  
Proposed research project: Rivets and rivet steels. Advisory report. Dec 15, 1942. Jan 1943.  
12p MI \$.50 Ph \$1.00.
- OSRD 1163 PBL 15879 (1-940)  
Wells, Cyril, and Mehl, Robert F.  
Steel for gun tubes. Part II. Acceptance tests for wrought gun tubes. Final report. Jan 1943.  
92p charts. MI \$1.00 Ph \$7.00.
- OSRD 1173 PBL 40555 (3-479)  
Lushbaugh, C. C.  
Pathology of poisoning with dichlorodimethylamine. Progress report, Jan 12, 1943. Feb 1943.  
12p tables, graphs. MI \$1.00 Ph \$1.00.
- OSRD 1174 PBL 5226 (1-348)  
Weith, A. J., and Turkington, V. H.  
Progress report on "Protective coatings for ship bottoms," to December 1, 1942. 1943.  
14p Ph \$1.00 MI \$.50.
- OSRD 1176 PBA 15620 (1-1035)  
Latimer, W. M.  
The "Pancake" effect in gas clouds. Progress report. Feb 1943.  
22p graphs, tabs. MI \$.50 Ph \$2.00.
- OSRD 1178 PBL 22480 (1-1591)  
Chilton, T. H., and Lapple, G. E.  
Removal of dust from air supplied to aircraft engines. Final report, Jan 22, 1943. Feb 1943.  
92p charts, drawings, graphs, photos. MI \$1.00 Ph \$7.00.
- OSRD 1179 PBL 33264 (3-25)  
Lampson, C. W.  
Cable compensation for piezoelectric gages. Jan 1943.  
9p graphs. MI \$1.00 Ph \$1.00.
- OSRD 1180 PBL 61009 (5-27)  
U. S. National Defense Research Committee  
Effect of change of power on stereoscopic range finder performance. (Bound with: Comparisons of precision at 12 and 24 power of observations taken with the MI height finder for fixed ground targets and moving aerial targets, by Merrill M. Flood.) Jan 1943.  
22p graphs, tables. MI \$1.00 Ph \$2.00.
- OSRD 1184 PBL 31039 (2-871)  
Foldy, L. L.  
Low frequency calibration technique for underwater sound instruments. Jan 1943.  
31p diagrs, graphs. MI \$1.00 Ph \$3.00.
- OSRD 1187 PBL 25413 (2-228)  
Studebaker Corp., South Bend, Ind.  
Cargo carrier, light, T-15. 1942-43.  
PB Pages. MI Ph  
25413 75 \$2.00 \$5.00  
25414 92 2.00 7.00  
25415 89 2.00 6.00
- OSRD 1192 PBA 18869 (2-245)  
Elderfield, R. C.  
The nitration of benzene and toluene in the absence of sulfuric acid according to a process submitted by the Autoxygen Company. Final report. Feb 1943.  
14p diagr, tables. MI \$.50 Ph \$1.00.
- OSRD 1193 PBA 15625 (1-1014)  
Pierce, W. C.  
An intermittent flow canister test machine. Progress report. Jan 1943.  
22p tabs, graphs, diagrs. MI \$.50 Ph \$2.00.
- OSRD 1195 PBA 30747 (2-556)  
Whitmore, F. C., and Aston, J. C.  
Specific conductance measurements of ammonium nitrate-nitric acid, water mixtures. Progress report. Feb 1943.  
18p tables. MI \$1.00 Ph \$2.00.
- OSRD 1202 PBL 4632 (1-404)  
Kraus, Charles A.  
Sensitized celluloid fire leaves. 1943.  
39p MI \$.50 Ph \$3.00.
- OSRD 1203 PBL 34119 (3-122)  
U. S. National Defense Research Committee  
Learning rate and training program for stereoscopic range finder observers. Report to the services No. 48: Div 7, Fire Control. Feb 1943.  
30p tables, graphs. MI \$1.00 Ph \$2.00.
- OSRD 1204 PBL 21117 (1-1497)  
Bohnenblust, H. F., and others  
Graphical solutions for problems of strain propagation in tension. Jan 1943.  
29p diagrs. MI \$.50 Ph \$2.00.
- OSRD 1205 PBL 19514 (1-1502)  
Mattason, R. L., and Almen, J. O.  
Effect of shot blasting on mechanical properties of steel (NA-115) Progress report, Oct 1, 1942-Dec 31, 1942. Feb 1943.  
27p diagrs, charts, tables. MI \$.50 Ph \$2.00.
- OSRD 1207 PBL 15901 (1-941)  
Wells, Cyril, and Mehl, R. F.  
Steel for gun tubes; Final Report, Dec 22, 1942. Part III-The effect of homogenization on the transverse ductility of wrought gun tubes. Feb 1943.  
48p tables, graphs. MI \$.50 Ph \$4.00.
- OSRD 1208 PBL 4031 (1-446)  
Viteles, Morris S., and others  
An outline of a four day 20mm. course of instruction 1943.  
13p Ph \$1.00 MI \$.50.
- OSRD 1209 PBL 4030 (1-446)  
Viteles, Morris S., and Smith, Kinsley R.  
Job analysis procedure. 1943.  
24p Ph \$2.00 MI \$.50.
- OSRD 1210 PBL 34114 (2-890)  
U. S. National Defense Research Committee  
Manual for selection of stereoscopic range finder operators. Feb 1943.  
30p drawings. MI \$1.00 Ph \$2.00.
- OSRD 1211 PBL 5247 (1-796)  
Fleser, L. F.  
Vest-pocket time-delay incendiary. Feb 1943.  
23p illus. MI \$.50 Ph \$2.00.
- OSRD 1213 PBL 21128 (1-1485)  
Greene, H. S.  
Sterilization of used Army shoe leather. Progress report to Feb 15, 1943. Feb 1943.  
14p MI \$.50 Ph \$1.00.
- OSRD 1214 PBL 27151 (2-281)  
Koehler, James S., and Seitz, Frederick  
On the propagation of the plastic deformation produced by an expanding cylinder. Jan 1943.  
30p graphs. MI \$1.00 Ph \$2.00.
- OSRD 1215 PBL 20174 (1-1410)  
Rosenthal, P. C., and Simmons, O. W.  
Study of the properties of malleable castings for use in tanks, Combat vehicles, and other military applications (OD-81): First quarterly report, Jan 15, 1943. Feb 1943.  
53p photos. MI \$1.00 Ph \$4.00.
- OSRD 1216 PBL 22582 (1-1570)  
Gillett, M. W.  
Examination of Army material: Fabrication methods used on a bimetal driving band on an 88 mm German projectile, and copper conservation through use of bimetal bands. Progress report, Jan 14, 1943. Feb 1943.  
13p MI \$.50 Ph \$1.00.
- OSRD 1221 PBA 5545 (1-537)  
Calcott, W. S., and others  
Report on "Experimental manufacture and process study of BAL" to December 1, 1942.  
1942.  
26p illus. Ph \$2.00 MI \$.50.
- OSRD 1222 PBM 28613 (2-423)  
Silverman, Leslie, and others  
Fundamental factors in the design of protective respiratory equipment. Jan 1943.  
131p photos, diagrs, tables. MI \$3.00 Ph \$9.00.
- OSRD 1225 PBL 31050 (2-948)  
Hartmann, E.  
Vertical beam pattern measurements by pulse method. Feb 1943.  
32p diagrs, graphs. MI \$1.00 Ph \$3.00.
- OSRD 1230 PBL 31051 (2-873)  
Jones, Reginald L.  
Standard supersonic projectors. Jan 1943.  
108p diagrs, tables, curves. MI \$3.00 Ph \$8.00.
- OSRD 1231 PBL 18859 (2-211)  
Brinkley, S. R., Jr., and Wilson, E. B., Jr.  
Calculation of detonation pressures of several explosives; Progress report. Mar 1943.  
13p tables. MI \$.50 Ph \$1.00.
- OSRD 1233 PBL 15885 (1-1251)  
Loring, C. H., and Elseen, A. R.  
Effect of hydrogen, nitrogen and oxygen in armor plate (OD-38-2). Progress report, Jan 5, 1943. Feb 1943.  
12p MI \$.50 Ph \$1.00.
- OSRD 1238 PBL 8808 (1-746)  
McAdams, W. H.  
Dispersion of exhaust gases in sea water. Mar 1943.  
195p illus. MI \$2.00 Ph \$13.00.

## Bibliography

15

OSRD 1240	PBL 19814 (2-36)	OSRD 1264	PBL 22861 (2-47)	OSRD 1299	PBL 22583 (1-1570)
Faust, Charles L., and Lukens, Hiram S.	Silver plating of steel flatware. Advisory report, Oct 23, 1942-Jan 23, 1943. Mar 1943.	Bee, John, Jr.	The design of granulation for rocket powder. Feb 1943.	Gillett, H. W.	Examination of enemy material: A metallurgical study of a sample of German surface hardened armor plate. Progress report, Feb 27, 1943. Mar 1943.
28p Mi \$.50 Ph \$2.00.	25p curves, tables. Mi \$.50 Ph \$2.00.	Gulliksen, Harold	Preparation of the United States Navy officer qualification test—Form I. Mar 1943.	21p graphs, photos. Mi \$.50 Ph \$2.00.	
OSRD 1241	PBL 20186 (1-1412)	OSRD 1273	PBL 13304 (1-901)	OSRD 1300	PBL 27421a (5-96)
Stitt, J. R.	Stress relief of weldments for machining stability (00-34-2): Quarterly progress report, Dec 22, 1942. Mar 1943.	Dumer, Pol E., and others	Preparation of the United States Navy officer qualification test—Form I. Mar 1943.	Hirschfelder, J. O., and Sherman, Jack	Simple calculation of thermochemical properties for use in ballistics. Mar 1943.
14p Mi \$.50 Ph \$1.00.	17p Mi \$.50 Ph \$2.00.	Dumer, Pol E., and others	The influence of impact velocity on the tensile properties of plain carbon steels and of a cast-steel armor plate. Mar 1943.	21p tables. Mi \$1.00 Ph \$2.00.	Addenda to PB 27421.
OSRD 1245	PBL 5238 (1-356)	OSRD 1274	PBL 18881 (2-36)	OSRD 1301	PBL 51009 (4-788)
Massachusetts Institute of Technology	Report on the M.I.T. project in high voltage radiography, for the period November 1941 to January 15, 1943. 1943.	Fetters, K. L., and others	Improvement in gun steel ingot practice (00-34-3). Progress report. Mar 1943.	Princeton University. Ballistic Research Group	Ballistics tests of STS armor plate, using 37 mm projectiles. Mar 1943.
Report on the M.I.T. project in high voltage radiography, for the period November 1941 to January 15, 1943. 1943.	63p illus. Ph \$5.00 Mi \$1.00.	OSRD 1275	PBL 15900 (1-1346)	11p tables graph. Mi \$1.00 Ph \$1.00.	
OSRD 1246	PBL 28597 (2-440)	Fetters, K. L., and others	Improvement in gun steel ingot practice (00-34-3). Progress report. Mar 1943.	OSRD 1302	PBL 18879 (1-1606)
Adam, Walter S., and others	OSRD contract No. OEMar-101, supplement No. 2. Second progress report, Oct 1-Nov 30, 1942. 1942.	OSRD 1276	PBL 30781 (2-592)	White, Merit P., and Griffis, LeVan	Wave propagation in a uniform bar whose stress-strain curve is concave upward. Mar 1943.
12p Mi \$1.00 Ph \$1.00.	17p Mi \$1.00 Ph \$1.00.	U. S. National Research Council. War Metallurgy Committee	Guide to weldability of steels. Mar 1943.	17p graphs. Mi \$.50 Ph \$2.00.	
OSRD 1248	PBA 5903 (1-495)	OSRD 1277	PBL 15744 (1-1022)	OSRD 1303	PBL 50862 (4-612)
Cannan, R. Keith	Special report on "The inactivation of enzymes by mustard gas," to March 1, 1943. 1943.	Anderson, H. V., and Tucker, C. W.	Residual stresses in cold-drawn non-ferrous alloys: An x-ray study; Progress report. Oct 15, 1942-Jan 15, 1943. Mar 1943.	Golden, Sidney	Ballistics tests of STS armor plate, using 37 mm projectiles. Mar 1943.
30p Ph \$2.00 Mi \$.50.	30p Ph \$2.00 Mi \$.50.	OSRD 1284	PBA 6543 (1-1454)	Dumer, P. E., and others	Factors influencing the propagation of plastic strain in long tension specimens. Mar 1943.
OSRD 1250	PBL 34125 (2-890)	Kharasch, M. S.	Possible toxic agents and intermediates: Progress report to Dec 14, 1942. Mar 1943.	44p curves, photos, tables. Mi \$.50 Ph \$3.00.	
U. S. National Defense Research Committee	Sex differences in stereoscopic ranging and in visual tracking. Feb 1943.	OSRD 1285	PBL 18880 (1-1606)	OSRD 1307	PBL 50850 (4-577)
Residual stresses in cold-drawn non-ferrous alloys: An x-ray study; Progress report. Oct 15, 1942-Jan 15, 1943. Mar 1943.	14p graphs. Mi \$1.00 Ph \$1.00.	White, Merit P.	The force produced by impact of a cylindrical body. Mar 1943.	Jones, Reginald L.	Mechanical and acoustic attachments for piezoelectric crystals used in transducers. Dec 1942.
OSRD 1251	PBL 28614 (2-468)	OSRD 1286	PBL 18880 (1-1606)	72p drawings, graphs. Mi \$2.00 Ph \$5.00.	
Lewis, W. K., and Smith, J. H.	Canister development studies. Progress report. Dec 1942.	White, Merit P.	The force produced by impact of a cylindrical body. Mar 1943.	OSRD 1308	PBL 31052 (2-873)
29p graphs. Mi \$1.00 Ph \$2.00.	29p graphs. Mi \$1.00 Ph \$2.00.	OSRD 1290	PBL 13305 (1-901)	Jones, Reginald L.	Properties of 45° Y cut Rochelle salt crystals, and the load carrying capacity of liquids used with them. Dec 1942.
OSRD 1254	PBA 6548 (1-594)	Gulliksen, Harold	Analysis of the N.R.O.T.C. selective examination (Form C0 and suggestions for its revision). Feb 1943.	59p graphs, diagrs. Mi \$2.00 Ph \$4.00.	
Du Pont de Nemours & Co.	Final report on "Stabilization of liquid sulfur trioxide." 1943.	OSRD 1291	PBL 19513 (2-36)	OSRD 1309	PBL 27539 (2-108)
17p Mi \$.50 Ph \$2.00.	16p photos, drawings, graphs. Mi \$4.00 Ph \$11.00.	Dorn, John E.	Properties and heat treatment of magnesium alloys. Progress report, Nov 8, 1942-Feb 10, 1943. Mar 1943.	Bell Telephone Laboratories, New York	Magnetic airborne detector, development of a magnetic orienting system. Jan 1943.
OSRD 1258	PBL 33987 (3-124)	OSRD 1292	PBL 19513 (2-36)	114p curves, drawings, photos. Mi \$1.50 Ph \$8.00.	72p photos, graphs, drawings, table. Mi \$2.00 Ph \$5.00.
U. S. National Defense Research Committee	Retention of helium in range and height finders. Mar 1943.	Kharasch, M. S.	Properties and heat treatment of magnesium alloys. Progress report, Nov 8, 1942-Feb 10, 1943. Mar 1943.	OSRD 1310	PBL 6557 (1-602)
161p photos, drawings, graphs. Mi \$4.00 Ph \$11.00.	161p photos, drawings, graphs. Mi \$4.00 Ph \$11.00.	OSRD 1294	PBA 6544 (1-539)	Bakelite Corporation. Research and Development Dept.	
OSRD 1260	PBL 22860 (2-48)	Kharasch, M. S.	The preparation of ethyldichloroarsine and related compounds. 1943.	- Final report on "Methods for cleaning ship bottoms." 1943.	
Davis, Leverett, Jr.	The dependence of the masses of rocket components on their dimensions. Feb 1943.	12p Mi \$.50 Ph \$1.00.	12p Mi \$.50 Ph \$1.00.	- 45p illus. Mi \$.50 Ph \$3.00.	
29p Mi \$.50 Ph \$2.00.	29p Mi \$.50 Ph \$2.00.	OSRD 1298	PBL 25412 (2-421)	OSRD 1312	PBL 22882 (2-54)
OSRD 1261	PBA 6581 (1-675)	Barnaby, H. S.	Completion of the design and testing of a centrifugal air cleaner for the N.R.O.T.C. on contract No. OEMar-133. Feb 1943.	Weatherby, B. B.	Effects of subsurface detonations in earth. Mar 1943.
DuPont de Nemours & Company	Production of sulfur monochlorides and thionyl chloride without the use of elemental chlorine. 1943.	9p diagrs, curve. Mi \$1.00 Ph \$1.00.	16p curves, graphs, tables. Mi \$.50 Ph \$2.00.		
30p Mi \$.50 Ph \$2.00.	30p Mi \$.50 Ph \$2.00.				
OSRD 1262	PBL 16482 (1-1245)				
Pierce, W. H., and others	Prevention of stress-corrosion cracking of cartridge brass by protective coatings or surface treatment (00-25): Progress report, Nov 15, 1942-Feb 15, 1943 Mar 1943.				
33p tables, graphs. Mi \$.50 Ph \$3.00.	33p tables, graphs. Mi \$.50 Ph \$3.00.				

## Bibliography

- OSRD 1314 PBL 12139 (I-766)  
Kurtz, Albert K., and others  
The experimental edition of code receiving tests March 29, 1943.  
13p Mi \$.50 Ph \$1.00.
- OSRD 1318 PBL 34794 (2-888)  
Sage, B. H.  
Investigation of the use of plastic-case igniters for the ASPC motor. Mar 1943.  
41p drawings, tables. Mi \$1.00 Ph \$3.00.
- OSRD 1319 PBL 22863 (2-48)  
Davis, Leverett, Jr., and Millis, Chester D., Jr.  
Dependence of the mass of propellant in a rocket motor on the web thickness and the motor dimensions. Mar 1943.  
16p Mi \$.50 Ph \$2.00.
- OSRD 1320 PBL 4028 (I-445)  
Viteles, Morris S., and others  
Developments in the use and construction of training aids for 4-day course in 20 mm. gunnery. 1943.  
38p Ph \$3.00 Mi \$.50.
- OSRD 1321 PBA 15606 (I-1036)  
Rodebush, W. H.  
Practical consideration involved in the use of screening smoke. Progress report. Apr 1943.  
32p diagrs. Mi \$.50 Ph \$3.00.
- OSRD 1323 PBL 5218 (I-389)  
Beranek, Leo L., and others  
Collected informal reports on sound control in airplanes. 1943.  
157p illus. Ph \$1.00 Mi \$2.00.
- OSRD 1324 PBL 22543 (2-164)  
Beranek, Leo L., and others  
Collected informal reports on interphone equipment. Apr 1943.  
148p diagrs, graphs, photos. Mi \$.50 Ph \$10.00.
- OSRD 1325 PBL 27332 (2-571)  
Cashman, R. J.  
Development of sensitive thallous sulfide photo-conductivity cells for detection of near infrared radiation. Mar 1943.  
18p Mi \$.100 Ph \$2.00.  
See also PB 27341.
- OSRD 1326 PBL 27348 (2-573)  
Hippel, Arthur von  
Selenium photocells. Progress report III. Jan 1943.  
25p diagrs, graphs. Mi \$1.00 Ph \$2.00.
- OSRD 1329 PBL 15894 (I-941)  
Wells, Cyril, and Mehl, Robert F.  
Steel for gun tubes; Part IV—A final summary; final report. Apr 1943.  
13p Mi \$.50 Ph \$1.00.
- OSRD 1330 PBL 22864 (2-47)  
Bowen, I. S., and others  
The effects of fin size, burning time and projector length on the accuracy of rockets. Mar 1943.  
36p Mi \$.50 Ph \$3.00.
- OSRD 1333 PBL 5224 (I-486)  
Kerst, D. W.  
Final report on 3 to 20 million volt radiography. Part 2. Recent developments of the betatron. March 22, 1943. 1943.  
15p Ph \$1.00 Mi \$.50.
- OSRD 1337 PBL 31213 (2-652)  
Cross, Howard C.  
Heat-resisting metals for gas turbine parts (N-102). Progress report, Sep 20, 1942-Apr 2, 1943. Apr 1943.  
117p Mi \$3.00 Ph \$8.00.  
For final report on this project see PB 16466.
- OSRD 1339 PBM 5936 (I-487)  
Karnofsky, David, and others  
Progress report on "The clinical pathology of di-(*B*-chloroethyl)-methylamine (TL 146)." 1943.  
72p illus. Ph \$5.00 Mi \$1.00.
- OSRD 1340 PBL 27302 (2-613)  
Imus, H. A.  
Manual for the adjustment and operation of the projection eikenometer. Mar 1943.  
8p diagr, photos. Mi \$1.00 Ph \$1.00.
- OSRD 1341 PBL 27304 (2-587)  
Imus, H. A., and Brodgen, W. J.  
Distributions of measures of interpupillary distance. Mar 1943.  
11p graph, table. Mi \$1.00 Ph \$1.00.
- OSRD 1345 PBA 5883 (I-1189)  
Beets, R. L., and Myers, N. P.  
Characteristics of aluminum soap gels of the Napalm type. Apr 1943.  
85p photo, tables, graphs, diagrams. Mi \$1.00 Ph \$6.00.
- OSRD 1346 PBL 5966 (I-439)  
Morgan, Myles  
Development of Morgan ram type flame thrower for M4A1 tank; monthly progress reports covering periods Jan 15–Feb 15, and Apr. 15-May 15, 1945. 1945.  
4p Mi \$.50 Ph \$1.00.
- OSRD 1347 PBL 18872 (I-1576)  
Bridgeman, P. W.  
Plastic deformation of steel under high pressure; Second progress report. Mar 1943.  
35p graphs, tables. Mi \$.50 Ph \$3.00.
- OSRD 1348 PBL 27542 (2-110)  
Peterson, R. A.  
Origin and reduction of maneuver noise in MAD equipped aircraft. Mar 1943.  
30p graphs. Mi \$1.00 Ph \$2.00.
- OSRD 1353 PBL 28641 (2-536)  
Hendrix, Don O., and others  
The Schmidt camera project. Sixth and final progress report. Aug 1942.  
5p Mi \$.100 Ph \$1.00.
- OSRD 1354 PBL 30785 (2-535)  
Dunham, Theodore, Jr.  
OSRD contract No. OEMar-101, supplement No. 2. Third progress report. Dec 1, 1942-Jan 31, 1943. n.d.  
16p photo, drawings. Mi \$1.00 Ph \$2.00.
- OSRD 1355 See OSRD 4119.
- OSRD 1356 PBA 6524 (I-683)  
Shriner, R. L.  
Progress report on "Synthesis of some basic Esters related to Choline and its derivatives." 1943.  
17p Mi \$.50 Ph \$2.00.
- OSRD 1357 PBA 6523 (I-683)  
Shriner, R. L.  
Progress report on "Synthesis of some Alkyl carbamates and Alkyl Dithiocarbamates." 1943.  
12p Mi \$.50 Ph \$1.00.
- OSRD 1359 PBL 22865 (2-47)  
Beek, John, Jr.  
Some problems of heat transfer in rockets. Apr 1943.  
37p curves, tables. Mi \$.50 Ph \$3.00.
- OSRD 1360 PBL 16752 (I-1411)  
Schuh, A. E., and Boyles, Alfred  
Improvements in and extension of centrifugal casting methods for production of miscellaneous war material items. Progress report, Mar 31, 1943. Apr 1943.  
38p photos. Mi \$.50 Ph \$3.00.
- OSRD 1361 PBL 22866 (2-47)  
Blitzer, Leon  
Effect of wind on the mean deflection of rockets. Apr 1943.  
15p curves, diagrs, tables. Mi \$.50 Ph \$1.00.
- OSRD 1362 PBL 34793 (2-884)  
Daniels, Farrington, and Wilfong, Robert E.  
Testing powder grains for fissures with special emphasis on nonvisual methods. Apr 1943.  
36p diagrs, photos. Mi \$1.00 Ph \$3.00.
- OSRD 1363 PBL 33988 (3-48)  
U. S. National Defense Research Commission  
Magnitude of range errors with MI stereoscopic heightfinder. Apr 1943.  
69p curves, charts, tables. Mi \$2.00 Ph \$5.00.
- OSRD 1371 PBL 4029 (I-446)  
Viteles, Morris S., and others  
Unit lesson plans for 4-day course in 20mm. gunnery. 1943.  
18p Ph \$2.00 Mi \$.50.
- OSRD 1372 PBL 27303 (2-585)  
Kappauf, W. E., and Brodgen, W. J.  
An instrument for the measurement of interpupillary distance. Apr 1943.  
7p Mi \$.100 Ph \$1.00.
- OSRD 1373 PBL 34795 (3-47)  
Kappauf, W. E., and Brodgen, W. J.  
The use of a template in making the interocular setting on the height finder. Apr 1943.  
8p diagrs. Mi \$1.00 Ph \$1.00.
- OSRD 1374 PBL 34782 (3-48)  
Riggs, L. A.  
Preliminary suggestions for a stereoscopic spotting trainer. Project memorandum No. 3. Apr 1943.  
10p drawings, diagrs. Mi \$1.00 Ph \$1.00.
- OSRD 1376 PBL 18878 (I-1580)  
White, Merit P.  
The failure of diaphragms under uniform pressure. Apr 1943.  
38p diagrs, graphs. Mi \$.50 Ph \$3.00.
- OSRD 1378 PBA 6552 (I-754)  
Woodhouse, J. C.  
Use of crude white arsenic in present Chemical Warfare Service arsenic trichloride process. Progress report to Nov 10, 1942. Apr 1943.  
24p Mi \$.50 Ph \$1.00.

## Bibliography

17

- OSRD 1379 PBA 6525 (I-539)  
Kharasch, M. S.  
Progress report on "Water-soluble BAL derivatives" to April 3, 1942. May 1943.  
16p Mi \$.50 Ph \$2.00.
- OSRD 1380 PBL 28598 (2-358)  
Adams, Walter S., and others  
OSRD contract No. OEMar-101 supplement No. 2. Fourth progress report. Feb 1943.  
15p Mi \$1.00 Ph \$1.00.
- OSRD 1381 PBA 6809 (I-754)  
Woodhouse, John C.  
Arsenic trichloride laboratory study of manufacture by the use of hydrogen chloride. Progress report to Apr 1, 1943. May 1943.  
42p illus. Mi \$.50 Ph \$3.00.
- OSRD 1384 PBL 27346 (2-641)  
Van Lear, G. A., Jr.  
A system of "photometry" for the near infrared. Mar 1943.  
21p Mi \$1.00 Ph \$2.00.
- OSRD 1385 PBA 18860 (2-84)  
Carter, R. O., Jr., and others  
Mechanism of gelatinization and solution of fibrous nitrocellulose in non-aqueous solvents: Progress report, Sep 1942-Mar 1943. May 1943.  
18p tables. Mi \$.50 Ph \$2.00.
- OSRD 1386 PBL 27548 (2-110)  
Tolles, W. E.  
Compensation of induced magnetic fields in MAD equipped aircraft. Apr 1943.  
19p Mi \$1.00 Ph \$2.00.
- OSRD 1387 PBL 31038 (2-871)  
Dietze, E., and Foldy, L. L.  
Directivity considerations for echo ranging projectors. Apr 1943.  
39p diagrs, drawings, graphs. Mi \$1.00 Ph \$3.00.
- OSRD 1388 PBL 4228 (I-304)  
Seitz, Fredrick  
The tearing of metals in compression at high rates of strain, an interim report. 1943.  
30p illus. Ph \$2.00 Mi \$.50.
- OSRD 1389 PBL 4641 (I-370)  
Carver, E. K., and Van Wazer, John R., Jr.  
Rheological properties of thickened fluids; second report. 1943.  
63p illus. Mi \$1.00 Ph \$5.00.
- OSRD 1390 PBM 6526 (I-758)  
Kharasch, M. S., and Weinhouse, S.  
Peroxides suitable for the treatment of H-1 burns. Progress report to Feb 24, 1943. May 1943.  
16p Mi \$.50 Ph \$2.00.
- OSRD 1392 PBL 27300 (2-614)  
Kappauf, W. E.  
A new motor attachment for the H2 or the Hark II stereoscopic trainer. Apr 1943.  
5p diagr. Mi \$1.00 Ph \$1.00.
- OSRD 1393 PBL 27331 (3-123)  
Pfund, A. H.  
Protective coatings for rock salt plates and metallic mirrors. Apr 1943.  
8p curve. Mi \$1.00 Ph \$1.00.
- OSRD 1395 PBL 15887 (I-1185)  
Lorig, C. H., and others  
Effects of hydrogen, nitrogen and oxygen in armor plate (OD-38-2). Progress report, Jan 5, 1943-Apr 5, 1943. May 1943.  
26p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 1396 PBL 34783 (3-46)  
Kappauf, W. E.  
A model of the optics of the stereoscopic height finder. Apr 1943.  
5p diagrs. Mi \$1.00 Ph \$1.00.
- OSRD 1397 PBL 58223 (4-864)  
Gulf Research and Development Co., Pittsburgh  
Experimental investigations in connection with high-angle dirigible bombs. Progress report, Oct 15, 1942 to Mar 15, 1943. March 1943.  
146p photos, graphs, diagrs. Mi \$3.00 Ph \$10.00.
- OSRD 1398 PBL 13107 (I-805)  
Barry, J. M.  
Memorandum on odograph tests at Fort Knox in medium tank M4A1E2. Feb 1943.  
17p illus. Mi \$.50 Ph \$2.00.
- OSRD 1398 PBL 13103 (I-806)  
Barry, J. M.  
Report on tests of June 3-August 25, 1942 on odograph installation in light tank. Sep 1942.  
41p Mi \$.50 Ph \$3.00.
- OSRD 1398 PBL 13099 (I-878)  
McNish, A. G.  
Progress report on Contract NDCrc-187 for the period June 30, 1942-February 28, 1943. Feb 1943.  
32p illus. Mi \$.50 Ph \$3.00.
- OSRD 1398 PBL 13106 (I-808)  
McNish, A. G.  
Report on the demonstration of odograph in aeroplane on October 9, 1942. Oct 1942.  
4p illus. Mi \$.50 Ph \$1.00.
- OSRD 1398 PBL 13104 (I-881)  
Tuckerman, Bryant.  
Report on the odograph installation in medium tank M4A1E2 No. 6. Sep 1942.  
8p illus. Mi \$.50 Ph \$1.00.
- OSRD 1398 PBL 13105 (I-958)  
Wright, W. F.  
Report on the odograph installation in B-18-B ARMY No. 7561. Oct 1942.  
8p Mi \$.50 Ph \$1.00.
- OSRD 1398 PBL 13108 (I-958)  
Wright, W. F.  
Report on installation of an odograph in B-24D bomber. Feb 1943.  
18p Mi \$.50 Ph \$2.00.
- OSRD 1398, appendix PBL 68910 (5-670)  
Duffin, R. J.  
Land, sea, and air logs. Feb 1943.  
17p Mi \$1.00 Ph \$2.00.
- OSRD 1401 PBL 6539 (I-673)  
Livingston, R. S.  
Progress report on "A direct specific detector for arsenical vapors," to May 8, 1943. May 1943.  
6p Mi \$.50 Ph \$1.00.
- OSRD 1402 PBL 18471 (I-1249)  
Duwez, P. E., and others  
Preliminary report on deflection and perforation of steel plates at impact velocities up to 150 FT/SEC. Apr 1943.  
15p diagrs, tables, graphs. Mi \$.50 Ph \$1.00.
- OSRD 1403 PBL 33266 (2-887)  
Sage, B. H.  
Extrusion of multiweb grains of ballistite. Apr 1943.  
19p photos, drawings. Mi \$1.00 Ph \$2.00.
- OSRD 1404 PBL 5507 (I-530)  
Wiener, Francis M., and Marquis, Richard J.  
Sound levels due to an airplane passing overhead in level flight. 1943.  
32p illus. Ph \$3.00 Mi \$.50.
- OSRD 1405 PBL 15858 (I-1323)  
Hess, W. F., and others  
Evaluation of weldability by direct measurement of cooling rates: The measurement of cooling rates associated with welding and their application to the selection of optimum welding conditions (OD-37-1). Final report, Apr 15, 1942 to Apr 15, 1943. Apr 1943.  
154p graphs, tables. Mi \$2.00 Ph \$11.00.
- OSRD 1407 PBL 12140 (I-755)  
Bakelite Corporation. Research and Development department.  
Fire retardant paints for navy ships. May 1943.  
14p illus. Mi \$.50 Ph \$1.00.
- OSRD 1411 PBL 67559 (5-665)  
Dike, Sheldon H.  
Precipitation static research. Final report. May 1943.  
24p photos, diagrs, drawings. Mi \$1.00 Ph \$2.00.
- OSRD 1413 PBL 30745 (2-529)  
Measly, G. H.  
The effect of charge wrapping on the optical records of detonating explosives. Progress report. Apr 15, 1943. May 1943.  
12p photos. Mi \$1.00 Ph \$1.00.
- OSRD 1414 PBL 18864 (2-159)  
McGill, Russell, and others  
The stability of PETN and pentolite: Progress report, Apr 1943. May 1943.  
60p photo, graphs, tables. Mi \$1.00 Ph \$4.00.  
See also PB 18865.
- OSRD 1415 PBL 33384 (3-24)  
Bell Telephone Laboratories, New York (city)  
Measuring tank suitable for acoustic measurements in water. Mar 1943.  
14p photos, graphs. Mi \$1.00 Ph \$1.00.
- OSRD 1416 PBL 28601 (2-442)  
Stockbarger, Donald C.  
The development of synthetic fluorite crystals. Apr 1943.  
6p tables, graph. Mi \$1.00 Ph \$1.00.
- OSRD 1417 PBL 28602 (2-377)  
Walter S., and others  
Air turbulence. Third progress report, June 1, 1941-Jul 31, 1942. 1942.  
2p Mi \$1.00 Ph \$1.00.
- OSRD 1424 PBL 8348 (I-604)  
Dodge, B. F., and Bliss, Harding  
Final report on "Analysis of low temperature air separation and gas liquefaction cycles" to January 1, 1943. 1943.  
47p illus. Mi \$.50 Ph \$4.00.

- OSRD 1425 PBL 28631 (2-462)  
Riches, H. M., and Thwaites, H. L.  
Operation of Diesel engines on oxygen.  
Final report to Oct 15, 1942. May 1943.  
69p photos, diagrs, tables, graphs.  
Mi \$2.00 Ph \$5.00.
- OSRD 1426 PBL 9391 (1-606)  
Spector, Norman A.  
Progress report on "A colorimetric method  
for the determination of traces of carbon  
dioxide in air." 1943.  
35p Mi \$.50 Ph \$3.00.
- OSRD 1427 PBL 15860 (1-1248)  
Doan, G. E., and others  
Evaluation of weldability by direct welding  
tests. Final report, April 15, 1943. Apr 1943.  
48p graphs. Mi \$.50 Ph \$4.00.
- OSRD 1428 PBL 20175 (1-1429)  
McIntyre, G. M., and Bryant, E. E.  
Development of a suitable and non-critical  
fused inorganic coating for steel canteens and  
cooking utensils (ZMC-18). Progress report,  
Jan 27 to Apr 15, 1943. May 1943.  
38p diagrs. Mi \$.50 Ph \$3.00.
- OSRD 1429 PBL 18875 (1-1576)  
Bridgman, P. W.  
The effect of cold-working on the ballistic  
properties of steel plate. May 1943.  
15p drawings, graphs, tables.  
Mi \$.50 Ph \$1.00.
- OSRD 1433 PBL 15878 (1-1253)  
Troiano, Alexander R.  
Investigation of the metallographic and  
physical properties of new types of gun steels  
(OD-34-3) Progress report, Apr 15, 1943. May  
1943.  
38p Mi \$.50 Ph \$3.00.
- OSRD 1434 PBL 16750 (1-1026)  
Lorig, C. H., and Udy, M. C.  
An analysis of heat flow in metal molds for  
centrifugal casting of gun tubes, airplane  
cylinders, tank bogey wheels, and other war  
material (OD-108). Progress report, Oct  
1942-Apr 1943. May 1943.  
47p photos, tables, graphs, diagrs.  
Mi \$.50 Ph \$3.00.
- OSRD 1437 PBA 6546 (1-683)  
Temple, S.  
Progress report on "Preparation of  
Diphosgene." May 1943.  
26p Mi \$.50 Ph \$2.00.
- OSRD 1438 PBL 6580 (1-476)  
Bergmann, Max, and others  
Progress report on the reactions of DH,  
TL146, TL329 and TL146 with some chemical  
constituents of biological systems. 1943.  
25p Mi \$.50 Ph \$2.00.
- OSRD 1439 PBA 6805 (1-558)  
Bergmann, Max  
Progress report on "Some reactions of  
mustard gas with proteins and proteolytic  
enzymes." 1943.  
47p Mi \$.50 Ph \$4.00.
- OSRD 1440 PBL 18479 (1-1245)  
Pierce, W. M., and others  
Prevention of stress-corrosion cracking of  
cartridge brass by protective coating or  
surface treatment (OD-25): Progress report:  
Feb 15-May 15, 1943. May 1943.  
18p Mi \$.50 Ph \$2.00.
- OSRD 1443 PBL 9390 (1-759)  
Bliss, Harding  
Progress report on "Regenerators." August 1,  
1942 to March 15, 1943. 1943.  
94p illus. Mi \$1.00 Ph \$7.00.
- OSRD 1444 PBA 6804 (4-286)  
Northrop, John H.  
Determination of HS, H-I, and other gases in  
air, at a distance from the operator. Informal  
progress report, Mar 20, 1943. May 1943.  
39p drawings, tables. Mi \$1.00 Ph \$3.00.
- OSRD 1445 PBL 22544 (2-178)  
Newman, E. R., and Stevens, S. S.  
The electronic generation of airplane noise  
for use in testing and training. May 1943.  
18p curves, diagrs. Mi \$.50 Ph \$2.00.
- OSRD 1447 PBA 15646 (1-985)  
Dole, Malcolm  
I. Nitrobenzene as a compound to simulate  
HS. II. Distribution of nitrobenzene vapors  
in a closed room. Progress report to February  
15, 1943. May 1943.  
23p tabs, charts, graphs. Mi \$.50 Ph \$2.00.
- OSRD 1448 PBA 9389 (1-603)  
Diehl, Harvey  
Progress report on "Development of oxygen-  
carrying chemicals," Part III, Sept 1, 1942 to  
Apr 20, 1943. 1943.  
118p illus. Mi \$1.50 Ph \$8.00.
- OSRD 1449 PBL 30788 (2-783)  
Gray, Peter  
Investigation of the causes for the clouding  
of glass surfaces under tropical field condi-  
tions. Mar 1943.  
6p Mi \$1.00 Ph \$1.00.
- OSRD 1450 PBL 30787 (2-536)  
Baker, James G.  
OSRD contract PDRC-583, symbol No. 1607,  
revised to OED-AR 474, project PDRC-583. Report  
No. 2, Dec 1, 1942-Apr 1, 1943. 1943.  
13p Mi \$1.00 Ph \$1.00.
- OSRD 1457 PBL 19520 (2-39)  
Russell, H. W.  
Fatigue properties of magnesium alloys and  
structures: Fatigue properties of magnesium  
alloy sheet. Progress report, Mar 7, 1943.  
May 1943.  
78p drawings, photos. Mi \$1.00 Ph \$6.00.
- OSRD 1458 PBL 40620 (3-638)  
Hartig, Henry E., and Brettell, George A., Jr.  
Primary listening teacher. Apr 1943.  
15p diagr, drawings. Mi \$1.00 Ph \$1.00.
- OSRD 1460 PBL 27159 (2-296)  
Dowker, C. H.  
Dispersion of a rotating rocket. May 1943.  
12p Mi \$1.00 Ph \$1.00.
- OSRD 1462 PBL 12144 (1-906)  
Bakelite Corp.  
Protective coatings for magnesium and its  
alloys. Progress report to Apr 30, 1943.  
May 1943.  
9p Mi \$.50 Ph \$1.00.
- OSRD 1463 See OSRD 4119.
- OSRD 1464 PBL 23795 (2-575)  
Muffly, Gary  
Detecting and firing device for magnetic  
influence ground mines. Progress report.  
Jan 1943.  
11p diagrs. Mi \$.50 Ph \$1.00.
- OSRD 1467 PBL 31059 (2-893)  
Pekeris, C. L.  
Theory of diffraction of sound in the shadow  
zone. May 1943.  
70p graphs. Mi \$2.00 Ph \$5.00.
- OSRD 1470 PBL 13120 (1-880)  
Tuckerman, Bryant  
Report on a trip to England, November 12,  
1942, to February 1, 1943, including demonstra-  
tion of the odograph, British aircraft  
compasses, British vehicular compasses, British  
dead-reckoning devices, and British marine  
logs. Mar 1943.  
18p Mi \$.50 Ph \$2.00.
- OSRD 1473 PBL 27158 (2-296)  
Denues, A. R. T.  
Studies of the 4.2-in. chemical mortar.  
Preliminary investigations and engineering  
tests to develop increased range for the  
4.2-in. chemical mortar by means adapted to  
immediate field application. Apr 1943.  
12ip Mi \$3.00 Ph \$9.00.
- OSRD 1474 PBL 27341 (2-574)  
Hole, W. L., and Cashman, R. J.  
Thallous sulfide photoconductive cells, a  
summary of service characteristics. Mar 1943.  
45p graphs, illus. Mi \$1.00 Ph \$3.00.  
See also PB 27322.
- OSRD 1478 PBL 34118 (3-48)  
U. S. National Defense Research Committee  
The effects of motivation and of fatigue on  
stereoscopic ranging and direct tracking.  
Report to the services No. 56: Div. 7, Fire  
Control. Sep 1942.  
35p graphs, tables. Mi \$1.00 Ph \$3.00.
- OSRD 1480 PBL 28538 (2-856)  
Rochester University. Institute of Optics  
Aids to night vision: Special instruments.  
Mar 1943.  
20p Mi \$1.00 Ph \$2.00.
- OSRD 1481 PBL 28539 (2-441)  
Rochester University. Institute of Optics  
Aids to night vision: Extension of the  
scotopic visibility curve to 3130A and to  
8000A. Mar 1943.  
15p drawings. Mi \$1.00 Ph \$1.00.
- OSRD 1484 PBL 27160 (2-300)  
Mallina, R. F., and Higgins, P. T.  
Firing mechanism for the 7-in. chemical  
rocket projector. May 1943.  
12p photos, diagrs. Mi \$1.00 Ph \$1.00.

# Bibliography

19

- OSRD 1485 PBL 19516 (2-35)  
Ballaseus, A. C., and Dorn, John E.  
Formability of magnesium alloy sheet.  
Progress report: Jan 15, 1943-Apr 10, 1943.  
May 1943.  
17p Mi \$.50 Ph \$2.00.
- OSRD 1490 PBL 18468 (I-1249)  
Dumez, P. E., and others  
Dynamic tests of the tensile properties  
of SAE 1020 steels, Armco iron and 17ST al-  
uminum alloy. May 1943.  
34p curves, tables, photomicrographs.  
Mi \$.50 Ph \$3.00.
- OSRD 1491 PBL 22545 (2-164)  
Egan, J. P., and others  
The articulation efficiency of magnetic  
and dynamic earphone used with various ear-  
phone cushions in noise. Jun 1943.  
68 photos, graphs, tables.  
Mi \$1.00 Ph \$5.00.
- OSRD 1492 PBL 22584 (2-43)  
Gillett, H. W.  
Examination of enemy materiel (OD-113):  
A metallurgical examination of a German 50 mm.  
high explosive round. Progress report, May 12,  
1943. Jun 1943.  
24p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 1493 PBL 5222 (I-486)  
Kerst, D. W.  
3 to 20 million volt radiography. 1943.  
4p Ph \$1.00 Mi \$.50.
- OSRD 1494 PBL 40537 (3-518)  
Clarke, George L.  
Wake visibility and its suppression.  
Final report. Mar 1943.  
23p photos. Mi \$1.00 Ph \$2.00.
- OSRD 1495 PBL 5223 (I-356)  
Massachusetts Institute of Technology. Radia-  
tion Laboratory  
Project in high voltage radiography for  
the period January 15 to June 15, 1943. 1943.  
27p illus. Ph \$2.00 Mi \$.50.
- OSRD 1496 See OSRD 4052.
- OSRD 1498 PBL 20829 (I-1347)  
Hawks, Douglass, Jr.  
A monograph on methods of making and  
inspecting thread plug and ring gages. Apr 1943.  
147p diagrs. Mi \$.150 Ph \$10.00.
- OSRD 1499 PBL 22585 (I-1578)  
Grenell, L. M., and others  
Examination of enemy materiel (OD-113):  
Chemical and metallurgical examination of  
three German bomb fragments. Progress re-  
port, May 17, 1943. Jun 1943.  
8p photos. Mi \$.50 Ph \$1.00.
- OSRD 1500 PBL 22586 (I-1578)  
Gillett, H. W., and others  
Examination of enemy materiel (OD-113):  
A metallurgical examination of a Japanese  
75 mm. high explosive shell. Progress re-  
port; May 14, 1943. Jun 1943.  
17p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 1501 PBL 22587 (2-43)  
Grenell, L. M., and others  
Examination of enemy materiel (OD-113):  
A metallurgical examination of a German  
Gerlich armor piercing shell. Progress re-  
port, May 15, 1943. Jun 1943.  
13p photos. Mi \$.50 Ph \$1.00.
- OSRD 1502 PBL 4652 (I-323)  
Thompson, Norman J., and Blair, Edwin A.  
Evaluation of incendiary bombs in  
furnished rooms.  
42p illus. Ph \$3.00 Mi \$.50.
- OSRD 1503 PBL 28615 (2-544)  
Pigford, R. L., and Tepe, J. B.  
Fragmentation of liquids. Progress re-  
port. Apr 1943.  
59p Mi \$2.00 Ph \$4.00.
- OSRD 1504 PBA 6527 (I-681)  
Gilman, Henry  
Progress report on "Thallium compounds."  
1943.  
33p Mi \$.50 Ph \$3.00.
- OSRD 1505 PBL 32664 (2-828)  
Mollard, George P.  
Factors affecting long distance sound  
transmission in sea water, a study of radio  
acoustic ranges from data taken by the U. S.  
Coast and Geodetic Survey. Mar 1943.  
27p charts, diagrs, graphs, tables.  
Mi \$2.00 Ph \$5.00.
- OSRD 1507 PBL 8609 (I-603)  
Aston, J. G., and others  
Heats of vaporization O<sub>2</sub>-N<sub>2</sub>. 1943.  
30p illus. Mi \$.50 Ph \$2.00.
- OSRD 1510 PBL 30761 (2-606)  
Brinkley, Stuart R., Jr., and Wilson, E. Bright,  
Jr.  
Calculation of the detonation proper-  
ties of some service explosives. Progress  
report. Jun 1943.  
13p tables. Mi \$1.00 Ph \$1.00.
- OSRD 1513 PBL 27295 (2-560)  
Gilbert, J. J.  
Trial of wire laying by aircraft. May 1943.  
31p diagrs, photos. Mi \$1.00 Ph \$3.00.
- OSRD 1514 PBL 16475 (I-1322)  
Gillett, H. W., and others  
Flash welding of alloy steels for ord-  
nance (OD-88): Progress report, Apr 15,  
1942 to Apr 15, 1943. Jun 1943.  
69p diagrs, photos, tables.  
Mi \$1.00 Ph \$5.00.
- OSRD 1516 PBA 6545 (2-889)  
Woodhouse, John C.  
Behavior of chemical agents M-1, HS, MS,  
and FS upon storage in contact with Monel  
metal. 1943.  
9p Ph \$1.00 Mi \$.50.
- OSRD 1517 PBA 6528 (I-681)  
Gilman, Henry  
Progress report on "Organo lead com-  
pounds as sternutators." Jun 1943.  
35p Mi \$.50 Ph \$3.00.
- OSRD 1518 PBL 27150 (2-300)  
Reynolds, George T.  
Small charge air blast experiments.  
Jun 1943.  
23p graphs. Mi \$1.00 Ph \$2.00.
- OSRD 1519 PBL 27145 (2-530)  
Reynolds, George T.  
A preliminary study of plane shock  
waves formed by bursting diaphragms in  
a tube. Jun 1943.  
30p diagrs, graphs, tables.  
Mi \$1.00 Ph \$2.00.
- OSRD 1520 PBL 24892 (2-215)  
Office of Scientific Research and Development  
Corrosion-resistant coatings for chem-  
ical munitions. Progress report. Jun 1943.  
14p tab. Mi \$.50 Ph \$1.00.
- OSRD 1522 PBL 24890 (2-298)  
Hill, G. Albert, and Clarke, R. G.  
Underwater flares. Progress report.  
Jun 1943.  
26p curves, tables. Mi \$.50 Ph \$2.00.
- OSRD 1523 PBL 15895 (I-937)  
Erikson, E. L., and Hansen, H. M.  
Fatigue strength of selected gun steels  
under combined stresses: Results of combined  
bending and torsion fatigue tests on SAE X4340  
steel; final report. Jun 1943.  
19p Mi \$.50 Ph \$2.00.
- OSRD 1524 PBL 22546 (2-185)  
Nichols, Rudolph H., Jr., and others  
National Defense Research Committee:  
Project SC-48, reports No. C-1 to C-29,  
and C-31, on interphone equipment, Mar 18,  
1943 to Jun 30, 1944. 1943-44.  
Graphs.
- | PB    | OSRD Series | Microfilm | Photostat |
|-------|-------------|-----------|-----------|
| 22546 | 1524        | \$1.50    | \$9.00    |
| 22548 | 1645        | 1.00      | 7.00      |
| 22887 | 1927        | 3.00      | 20.00     |
| 22553 | 3682        | 1.00      | 5.00      |
| 22554 | 3683        | 2.50      | 15.00     |
| 22890 | 3905        | 2.00      | 12.00     |
- OSRD 1525 PBL 19813 (I-1523)  
Lewis, Dartrey  
The corrosion fatigue failure of air-  
craft control cables (M-101): The effect of  
metallic coatings and lubricants on fatigue  
properties of aircraft cables. Progress  
report 2, Nov 1, 1942-Apr 30, 1943. Jun 1943.  
107p photos, drawings, curves.  
Mi \$1.50 Ph \$8.00.
- OSRD 1526 PBL 40557 (3-482)  
Johnston, Harold S.  
Micrometeorological observations at United  
States Army smoke tests in the Los Angeles  
area, Mar 17, 18, and 19 and Apr 20, 1943.  
Progress report, May 3, 1943. Jun 1943.  
8p tables. Mi \$1.00 Ph \$1.00.
- OSRD 1528 PBL 22547 (2-165)  
Ericson, Harold L., and others  
I. A. F. factors in portable radio equipment;  
II. Redesign of SCR-274M and ATA modulators;  
III. Performance of Eaves sound projector. Jun  
1943.  
51p diagrs, graphs, photos.  
Mi \$1.00 Ph \$4.00.
- OSRD 1529 PBA 6529 (I-41)  
Adkins, Homer  
Progress report on "Preparation of esters of  
L-L-Dibromo or Dichloro Dibasic Acid." 1943.  
11p Mi \$.50 Ph \$1.00.
- OSRD 1532 PBL 27152 (2-300)  
Reynolds, George T.  
Charge orientation tests. Jun 1943.  
24p diagrs, tables. Mi \$1.00 Ph \$2.00.
- OSRD 1533 PBA 6547 (I-476)  
Biswell, C. B., and others  
Preliminary study of a plant to pro-  
duce BAL (capacity, 200,000 lb. per year). 1943.  
38p Mi \$.50 Ph \$3.00.

- OSRD 1536 PBL 13303 (I-901)  
Gulliksen, Harold, and others  
Averages, standard deviations, and inter-correlations of Navy aptitude tests. Jun 1943.  
5sp Mi \$.100 Ph \$.00.
- OSRD 1538 PBL 40611 (3-470)  
Rajchman, Jan  
RCA computer, Final report. Mar 1943.  
120p photos, drawings, diagrs. Mi \$.00.  
Ph \$10.00.
- OSRD 1539 PBL 8347 (I-606)  
Smith, A. M., and Catterall, W. E.  
Properties of Salcomeine and Ethamine and the separation of atmospheric oxygen therewith. 1943.  
130p illus. Mi \$.150 Ph \$10.00.
- OSRD 1543 PBL 34144 (2-620)  
Beranek, Leo L., and others  
Principles of sound control in airplanes. 1944.  
36p graphs, tables, charts, diagrs. Mi \$.00 Ph \$27.00.  
(For advance summary see PB 5506.)
- OSRD 1545 See OSRD 1524.
- OSRD 1546 See OSRD 3143.
- OSRD 1547 PBA 6807 (I-757)  
McReynolds, J. P.  
"Determination of arsenicals by a dichromate volumetric method." Progress report to May 25, 1943. Jun 1943.  
8p Mi \$.50 Ph \$1.00.
- OSRD 1548 PBA 6532 (I-751)  
McReynolds, J. P.  
Examination of the thiocarbazones for use in the colorimetric determination of arsenicals. Jun 1943.  
20p illus. Mi \$.50 Ph \$2.00.
- OSRD 1549 PBL 15896 (I-937)  
Fetter, K. L., and others  
Improvement in gun steel ingot practice; progress report. Jun 1943.  
92p graphs, tables, photos. Mi \$.100 Ph \$.700.
- OSRD 1550 PBL 15864 (I-1007)  
Paschkis, Victor  
Evaluation of weldability by correlation of electrical and heat constants; determination of cooling curves and analysis of heat transfer in ARC welding of plates. Final report. Jun 1943.  
58p diagrs, graphs. Mi \$.100 Ph \$4.00.
- OSRD 1552 PBL 31037 (2-870)  
Foldy, L. L.  
Theory of passive linear electromechanical transducers. Jun 1943.  
53p Mi \$.200 Ph \$4.00.
- OSRD 1555 PBL 39716 (3-429)  
Christensen, R. J., and others  
Volume reverberation, scattering and attenuation vs. frequency. Apr 1943.  
35p graphs, tables. Mi \$.100 Ph \$.300.
- OSRD 1558 PBL 68911 (5-692)  
Corey, Robert B., and others  
Investigations of double-base powders, spectrophotometric studies. II. Jun 1943.  
15p graphs, tables. Mi \$.100 Ph \$.100.
- OSRD 1559 PBL 25382 (2-374)  
Durand, W. F., and Kenneron, W. H.  
Aircraft brakes. Final report. May 1943.  
16p Mi \$.100 Ph \$.200.
- OSRD 1564 PBL 22589 (I-1569)  
Gillett, H. W., and others  
Examination of enemy materiel (OD-113): A chemical and metallurgical examination of a German caltrap or tire puncture. Progress report, May 26, 1943. Jul 1943.  
8p drawings, photos. Mi \$.50 Ph \$.100.
- OSRD 1565 PBL 22588 (2-44)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113): A metallurgical examination of two German 37 mm. high-explosive shells. Progress report, May 15, 1943. Jul 1943.  
19p Mi \$.50 Ph \$2.00.
- OSRD 1566 PBL 5216 (I-413)  
Kerst, S. W.  
Report on 3 to 20 million volt radiography. n.d.  
8p Ph \$.100 Mi \$.50.
- OSRD 1567 PBL 32196 (2-829)  
Courant, R., and Friedrichs, K.  
Interaction of shock and rarefaction waves in one-dimensional motion. Progress report. Jul 1943.  
66p diagr. Mi \$.200 Ph \$.60.  
See also PB 32719.
- OSRD 1568 PBA 6531 (I-756)  
Molfrom, M. L.  
Progress report on I. The preparation and properties of some nitro-olefine derivatives. II. The Determination of vapor pressures and crystal densities of organic compounds. Jul 1943.  
27p illus. Mi \$.50 Ph \$2.00.
- OSRD 1569 PBL 15644 (I-1123)  
Blacet, F. E., and Roof, J. G.  
Persistence experiments with sulfur dioxide in a wooded area. Progress report to May 31, 1943. Jun 1943.  
16p map, tables. Mi \$.50 Ph \$.200.
- OSRD 1570 PBA 6811 (I-757)  
Bartlett, Paul D.  
"The B-chloroethylamines; a further kinetic analysis of the dimerization and hydrolysis of methybis-B-chloroethylamine; further observations on diethyl-B-chloroethylamine and tria-B-chloroethylamine." Jun 1943.  
34p Mi \$.50 Ph \$3.00.
- OSRD 1571 PBL 22549 (I-1599)  
Abrams, M. H., and others  
Collected informal communications on the basic audibility of English words for use as oral codes, alphabetic equivalents, etc. Jul 1943.  
166p Mi \$.200 Ph \$12.00.
- OSRD 1572 PBL 22550 (2-86)  
Egan, J. P., and others  
Collected informal communications on articulation tests of interphone equipment. Jul 1943.  
95p tables, graphs. Mi \$.100 Ph \$.700.
- OSRD 1573 PBL 33382 (2-971)  
Foldy, L. L.  
Two memoranda on double dichotomies; Statistical analysis of double dichotomies (I-18-3AE), and number of trials necessary for comparing percentages (3-6-3AE). Mar 1943.  
32p graph. Mi \$.50 Ph \$.300.
- Advantages of aluminum as a dome material— theoretical study. Jun 1943.  
17p graphs, drawings. Mi \$.100 Ph \$.200.
- OSRD 1575 See OSRD 4119.
- OSRD 1576 PBA 6808 (I-533)  
McReynolds, J. P.  
Detection of mustard by hot wire or furnace oxidation and rapid analytical determination of arsenicals by reaction with thiocarbazones or by oxidation with dichromate to July 1, 1943. 1943.  
18p illus. Mi \$.50 Ph \$2.00.
- OSRD 1577 PBA 30744 (2-785)  
Kincaid, J. F., and St. George, R. C.  
The 32<sup>o</sup> transition of ammonium nitrate. Progress report, Jun 15, 1943. Jul 1943.  
17p tables. Mi \$.100 Ph \$.200.
- OSRD 1578 PBL 18857 (2-135)  
Kincaid, J. F., and Dailey, B. P.  
Thermochemical examination of a number of commercial and experimental propellants: Progress report, to May 15, 1943. Jul 1943.  
15p Mi \$.50 Ph \$.100.
- OSRD 1579 PBL 9402 (I-505)  
Hetherington, C. L., and Catterall, W. E.  
Progress report on "Special engineering systems utilizing chelate chemical absorbents for oxygen production." 1943.  
152p illus. Mi \$.200 Ph \$.11.00.
- OSRD 1580 PBA 8002 (I-607)  
Weinkauf, O. J., and Kyrides, L. P.  
Fuel report on  
"Process for producing o-Ethaven." 1943.  
15p Mi \$.50 Ph \$.100.
- OSRD 1581 PBL 8607 (I-830)  
Aston, J. G., and others  
Vapor-liquid equilibrium data for the system Argon-Oxygen. Progress Report to May 15, 1943. 1943.  
44p illus. Mi \$.50 Ph \$.300.
- OSRD 1582 PBL 12088 (I-881)  
National Defense Research Committee  
Odographs (Course plotters or deadreckoning tracers). Jul 1943.  
17p Mi \$.50 Ph \$.200.
- OSRD 1583 PBA 6551 (I-533)  
Price, C. C., and Buswell, A. M.  
Progress report on "The detection of certain arsenical agents in water by means of dibenzylthiocarbazone," to May 25, 1943. 1943.  
9p Mi \$.50 Ph \$.100.
- OSRD 1585 PBL 27347 (2-578)  
Van Lear, G. A., Jr.  
Notes on generalized photometry, with particular application to the near infrared. Revised schematic version. Jun 1943.  
7p tables. Mi \$.100 Ph \$.100.
- OSRD 1588 PBL 20290 (2-47)  
Columbia University, Div of War Research, Statistical Research Group  
Two memoranda on double dichotomies; Statistical analysis of double dichotomies (I-18-3AE), and number of trials necessary for comparing percentages (3-6-3AE). Mar 1943.  
32p graph. Mi \$.50 Ph \$.300.

## Bibliography

21

- OSRD 1589 PBL 30772 (2-591)  
Simmons, O. W., and others  
Study of the properties of malleable castings for use in tanks, combat vehicles, and other military applications (OD-81). Final report, Sep 1942-Jun 30, 1943. Jul 1943.  
67p Mi \$2.00 Ph \$5.00.  
See PB 20174 for 1st quarterly report.
- OSRD 1590 PBL 27154 (2-240)  
Prosen, Edward J., and Gilmont, Roger  
Heats of combustion and formation of diethylphthalate, dibutylphthalate, dinitrotoluene, diethyldiphenylurea and nitroguanidine. Jul 1943.  
14p Mi \$1.00 Ph \$1.00.
- OSRD 1591 PBL 4026 (I-446)  
Viteles, M. S., and others  
The 40 mm. gun training and indoctrination of crew. 1943.  
7p Ph \$1.00 Mi \$.50.
- OSRD 1592 PBL 20830 (I-1356)  
Mead, Leonard C.  
Research and development work: Summary report from Aug 1, 1942 to Jul 1, 1943. Jun 1943.  
15p photos, diagr. Mi \$.50 Ph \$1.00.
- OSRD 1594 PBA 6540 (I-948)  
Dupont de Nemours, E.I., and Co., Jackson Laboratory  
The preparation of ethyldichloroarsine on a pilot plant scale. 1943.  
8p Mi \$.50 Ph \$1.00.
- OSRD 1595 PBL 33370 (2-824)  
Rochester University, Institute of Optics  
Development of Kellner-Schmidt optical systems. I. Interim report, Jan 1, 1943. Jun 1943.  
28p drawings, graphs. Mi \$1.00 Ph \$2.00.  
For part II see OSRD 1597.
- OSRD 1597 PBL 3371 (2-824)  
Rochester University, Institute of Optics  
Development of Kellner-Schmidt optical systems. II. Fourteen in air type Kellner-Schmidt system. Jun 1943.  
7p drawing, graphs. Mi \$1.00 Ph \$1.00.  
For part I see OSRD 1595.
- OSRD 1598 PBL 33374 (2-824)  
Rochester University, Institute of Optics  
Air-surface vessel identification systems II and III Interim Reports, Mar 1, 1943. Jun 1943.  
Photographs, graphs, drawings.
- | PB      | OSRD  | Mi   | Ph                |
|---------|-------|------|-------------------|
| Part I  | 33374 | 1598 | 11p \$1.00 \$1.00 |
| Part II | 33375 | 1599 | 40p 1.00 3.00     |
- OSRD 1599 See OSRD 1598
- OSRD 1608 PBL 58195 (4-864)  
Fitzwilliam, J. W.  
Development of a dirigible bomb. Eight progress report, Apr 30, 1943. Apr 1943.  
97p tables, photos, graphs, diagrs. Mi \$2.00 Ph \$7.00.
- OSRD 1609 PBL 58196 (4-866)  
Warren, R. E.  
Development of a dirigible bomb. Ninth progress report, Apr 30, 1943. Apr 1943.  
54p tables, graphs, diagrs. Mi \$2.00 Ph \$4.00.
- OSRD 1610 PBL 19812 (I-1525)  
Godfrey, H. J.  
Corrosion fatigue failure of aircraft control cables (N-101): The effect of sheave diameter on the fatigue life of aircraft cables. Progress report 3, Nov 1, 1942-Apr 30, 1943. Jul 1943.  
36p drawings, tables, curves. Mi \$.50 Ph \$3.00.  
See PB 19813, 19815, 19821, 19822, 19831, 19832, 19835.
- OSRD 1613 PBL 13119 (I-770)  
Dalke, J. L.  
Report on installation of odograph in T-15 cargo carrier, January 6, to March 15, 1943. Jun 1943.  
17p illus. Mi \$.50 Ph \$2.00.
- OSRD 1614 PBL 13118 (I-806)  
Barry, James M.  
Report on tests of odograph in halftrack, Fort Belvoir, Va., April 8, 1943 to May 5, 1943. Jun 1943.  
17p Mi \$.50 Ph \$2.00.
- OSRD 1615 PBL 24884 (2-246)  
Brush Development Co., Cleveland, Ohio  
Fourth report on the development of a high frequency strain analyzer. Jun 1943.  
5p Mi \$.50 Ph \$1.00.
- OSRD 1616 PBL 3388 (I-604)  
Field, E., and others  
Final report on "Salomone as an absorbent for separating atmospheric oxygen." 1943.  
83p Mi \$1.00 Ph \$6.00.
- OSRD 1617 PBL 9405 (I-606)  
Lorrell, J. P., and Catterall, W. E.  
Progress report on "The regenerative chemical system for oxygen production on board aircraft." 1943.  
60p illus. Mi \$1.00 Ph \$4.00.
- OSRD 1629 PBL 21135 (I-1420)  
Harris, Cyril M.  
A listening type acoustical firing unit for controlled mine warfare, type T5E18. Jun 1943.  
30p photos, diagrs, graphs. Mi \$.50 Ph \$2.00.
- OSRD 1629 Supp. PBL 21136 (I-1420)  
Harris, Cyril M.  
Type T5E18—Production model: a listening type acoustical firing unit for controlled mine warfare. Sep 1943.  
17p Mi \$.50 Ph \$2.00.
- OSRD 1630 PBA 6806 (I-496)  
Davis, Selby B., and others  
Progress report on A study of the reaction between mustard gas and proteins to June 7, 1943. 1943.  
20p Mi \$.50 Ph \$2.00.
- OSRD 1631 PBA 6519 (I-696)  
Rotariu, G. J.  
Toxicity studies of substituted halogenated aliphatic hydrocarbons. Jun 1943.  
11p Mi \$.50 Ph \$1.00.
- OSRD 1633 PBL 16432 (I-1022)  
Anderson, H. V., and Tucker, C. W.  
Residual stresses in cold-drawn nonferrous alloys: An X-ray study. Final report, part I, Dec 15, 1941-Jul 1, 1943. Jul 1943.  
77p graphs. Mi \$1.00 Ph \$6.00.
- OSRD 1635 PBL 22590 (I-1569)  
Gillett, H. W.  
Examination of enemy material (OD-113): A chemical and metallurgical examination of a German needle bearing. Progress report 10, Jun 3, 1943. Jul 1943.  
13p photos. Mi \$.50 Ph \$1.00.
- OSRD 1636 PBL 15855 (2-25)  
Feild, A. L., and others  
Development of armor welding electrodes (OD-36-2): Relation of the composition of Austenitic (20 Cr-10 Ni) electrodes to the physical and ballistic properties of armor weldments. Progress report, Jun 15, 1943. Jul 1943.  
37p photos, tables, diagrs. Mi \$.50 Ph \$3.00.  
See also PB 15842 for Part II.
- OSRD 1637 PBL 34784 (3-117)  
Kappauf, W. E.  
The design and construction of a height finder sunshade. Jun 1943.  
10p drawings. Mi \$1.00 Ph \$1.00.
- OSRD 1638 PBL 27299 (2-612)  
Fisher, Harold M., and Imus, Henry A.  
The adjustment of the M2 trainer for standard testing. Jun 1943.  
7p sketches. Mi \$1.00 Ph \$1.00.
- OSRD 1641 PBL 18474 (I-1240)  
Duwez, P. E., and others  
The influence of impact velocity on the tensile properties of class B armor plate, heat-treated alloy steels and stainless steel. Jul 1943.  
63p diagrs, graphs. Mi \$1.00 Ph \$5.00.
- OSRD 1652 PBM 6816 (I-559)  
Lazier, W. Z.  
Progress report on "CMR-NDR joint project on BAL ointment." Report on the work of the pharmaceutical and chemical subcommittee for the period January through April, 1943. 1943.  
84p Mi \$1.00 Ph \$6.00.
- OSRD 1656 PBL 19552 (I-1413)  
Thompson, J. G., and others  
Beryllium-aluminum alloys for engine parts: Final report, May 1943.  
30p Mi \$.50 Ph \$2.00.
- OSRD 1657 PBL 22899 (2-262)  
Mikhailov, G. S., and Humberstone, J. H.  
Survey of activity relative to the application of large diameter austenitic electrodes to the welding of armor. Advisory report. Jul 1943.  
26p tables. Mi \$.50 Ph \$2.00.
- OSRD 1659 PBL 27146 (2-816)  
Germer, L. H., and others  
A study by means of electron and X-ray diffraction of the alteration of steel by hot powder gases. Jul 1943.  
23p diagrs, photos. Mi \$1.00 Ph \$2.00.
- OSRD 1666 PBL 27147 (2-297)  
Fulcher, Gordon S.  
The temperature of the bore surface of guns. Jul 1943.  
117p tables, drawings, curves. Mi \$3.00 Ph \$8.00.

- OSRD 1657 PBL 15626 (I-1388)  
LaMere, V. K., and Sinclair, David  
Dissipation of water fog by intense sound of audible frequency. Progress report, Jun 12, 1943. Aug 1943.  
31p Mi \$.50 Ph \$3.00.
- OSRD 1668 PBL 32200 (2-562)  
LaMere, Victor K., and Sinclair, David  
A portable optical instrument for the measurement of particle size in smokes, the "Owl," and an improved homogenous aerosol generator. Progress report, Jun 10, 1943. Aug 1943.  
32p drawings. Mi \$1.00 Ph \$3.00.
- OSRD 1669 PBL 20176 (I-1412)  
Stitt, J. R.  
Stress relief of weldments for machining stability (OD-34-2): Progress report No. 2, Jul 15, 1943. Jul 1943.  
24p diagrs, drawings. Mi \$.50 Ph \$2.00.
- OSRD 1670 PBA 5810 (I-538)  
Coleman, George H.  
Report on "The preparation and stability of nitrogen mustards," to June 21, 1943.  
21p Mi \$.50 Ph \$2.00.
- OSRD 1672 PBA 20834 (2-158)  
Bartlett, Paul D., and Ross, Sidney D.  
The kinetics of oxidation of B,D-dichlorodiethylsulfide and thiodiglycol: Progress report to May 13, 1943. Aug 1943.  
18p graphs, tables. Mi \$.50 Ph \$2.00.
- OSRD 1673 PBL 19550 (I-1503)  
Sachs, George, and others  
Correlation of information available on the fabrication of aluminum alloys (NA-125): Section I—Classification and analysis of the forming of various parts. Final report. Vol. I, Apr-Jun 1943. Vol II, Jun-Oct 1943. Jul, Dec 1943.  
drawings.  
PB P OSRD MI Ph  
19550 151 1673 \$2.00 \$11.00  
19570 264 3060 3.00 18.00
- OSRD 1674 See OSRD 3061.
- OSRD 1678 PBL 30742 (2-504)  
Sage, Charles G.  
A condenser gage apparatus for measuring the pressure and thrust characteristics of jet propulsion meters. Progress report, Jul 20, 1943. Aug 1943.  
17p photos, drawings. Mi \$1.00 Ph \$2.00.
- OSRD 1687 PBA 15807 (I-1038)  
Rodebush, W. H., and others  
Large scale screening tests, Camp Sibert, Ala., May 4-7, 1943. Progress report. Aug 1943.  
21p tabs, photos. Mi \$.50 Ph \$2.00.
- OSRD 1688 PBL 11214 (I-688)  
Hathaway, Claude H.  
Development of a special oscilloscope for Aberdeen Proving Ground. Jul 1943.  
18p illus. Mi \$.50 Ph \$2.00.
- OSRD 1690 PBL 32205 (2-865)  
Schumb, Walter C., and others  
The generation of fluorine. Progress report. Jun 1943. Final report Jan 1944. Feb 1944.  
PB 32205 OSRD 1690 15p MI \$1.00 Ph \$1.00  
PB 32206 OSRD 3227 8p MI \$1.00 Ph \$1.00
- OSRD 1692 PBL 6691 (I-868)  
Lewis, W. K.  
Use of sulfur boiler for smoke generator. To Dec 31, 1942. Final report. Aug 1943.  
108p illus. Mi \$1.50 Ph \$8.00.
- OSRD 1694 PBL 22591 (2-46)  
Henderson, A. S., and others  
Examination of enemy material: A chemical and metallurgical examination of a section of Japanese body armor. Progress report 12, Jul 22, 1943. Aug 1943.  
8p photos. Mi \$.50 Ph \$1.00.
- OSRD 1695 PBL 22592 (I-1575)  
Gillett, H. W., and others  
Examination of enemy material (OD-113): Metallurgical examination of miscellaneous Japanese articles. Progress report II, Jul 16, 1943. Aug 1943.  
8p photos. Mi \$.50 Ph \$1.00.
- OSRD 1697 PBL 15632 (I-1-24)  
Johnstone, H. F., and Roach, P. G.  
A study of oil smoke plumes by motion pictures. Progress report, to Jun 15, 1943. Aug 1943.  
7p Mi \$.50 Ph \$1.00.
- OSRD 1698 PBL 20292 (2-457)  
Handelman, G. H., and Prager, M.  
On the determination of the energy of plastic deformation absorbed in a diaphragm. Jul 1943.  
16p Mi \$.50 Ph \$2.00.
- OSRD 1699 PBL 20213 (I-1501)  
Grange, R. A.  
The effect of boron upon the structure and heat-treating characteristics of steel: Report. Aug 1943.  
18p photomicrographs, graphs.  
Mi \$.50 Ph \$2.00.
- OSRD 1701 PBL 20284 (2-55)  
Hoffman, Arthur C., and Head, Leonard C.  
The performance of trained subjects on a complex task of four hours duration. Jul 1943.  
16p diagr, graphs. Mi \$.50 Ph \$2.00.
- OSRD 1702 PBL 4644 (I-323)  
Thompson, Norman J.  
Gasoline-cellulose filling for 500 pound incendiary bomb. 1943.  
19p Ph \$2.00 Mi \$.50.
- OSRD 1703 PBL 27163 (2-300)  
Osborne, D. W., and Walker, M. J.  
Tests of rotating Budd 4½-in. rockets. Aug 1943.  
28p photos, graphs, tables, drawings.  
Mi \$1.00 Ph \$2.00.
- OSRD 1704 PBL 58194 (4-1062)  
Hutzenlaub, J. F.  
Development of a dirigible bomb. Seventh progress report. Apr 15, 1943. Apr 1943.  
92p photos, graphs, diagrs.  
Mi \$2.00 Ph \$7.00.
- OSRD 1705 PBL 31026 (2-991)  
Splitzer, Lyman, Jr.  
Acoustic properties of gas bubbles in a liquid. Jul 1943.  
80p graphs. Mi \$2.00 Ph \$6.00.
- OSRD 1707 PBL 18858 (I-1583)  
Brinkley, Stuart R., Jr., and Wilson, E. Bright, Jr.  
Calculation of the detonation velocities of some pure explosives: Progress report. Aug 1943.  
51p graphs, tables. Mi \$1.00 Ph \$4.00.
- OSRD 1710 See OSRD 4119
- OSRD 1712 PBL 15630 (I-1124)  
Gillman, T. S., and Hayward, P.  
Smoke experiments carried out at Camp Sibert, Alabama, Progress report, to May 15, 1943. Aug 1943.  
43p tables, graph, maps, photos.  
Mi \$.50 Ph \$3.00.
- OSRD 1713 PBL 34759  
Crawford, Bryce L., Jr., and Isben, Herbert S.  
Determination of ignition temperatures of doublebase powders. Progress report. Jul 1943.  
49p curves, tables. Mi \$1.00 Ph \$4.00.
- OSRD 1714 PBL 15265 (I-939)  
Jordan, Henrie A., and others  
Exact theory of the stress distribution in a shell due to engraving. Jul 1943.  
34p tables. Mi \$.50 Ph \$3.00.
- OSRD 1715 PBL 22593 (I-1492)  
Henderson, A. S., and others  
Examination of enemy material: A metallurgical examination of two German 8.8 cm. high-explosive shells. Progress report I3, Jul 20, 1943. Aug 1943.  
43p tables, photos. Mi \$.50 Ph \$3.00.
- OSRD 1716 PBA 6518 (I-695)  
Coon, Julius H., and others  
Toxicity studies of phosphorus, phosphoryl and thiophosphoryl halides. Jul 1943.  
11p Mi \$.50 Ph \$1.00.
- OSRD 1717 PBA 6013 (I-561)  
Smith, Homer W.  
Review of the literature on the systemic action of mustard gas. 1943.  
58p Mi \$1.00 Ph \$4.00.
- OSRD 1722 PBA 9407 (I-606)  
Prentiss, S. S.  
Report on generation of oxygen from alkali peroxides. 1943.  
19p illus. Mi \$.50 Ph \$2.00.
- OSRD 1724 PBL 21127 (2-2)  
Wilcox, R. C.  
Production of ammonia from urine: Progress report. Aug 1943.  
41p Mi \$.50 Ph \$3.00.
- OSRD 1729 PBL 20831 (I-1423)  
Hoffman, Arthyr C.  
The relationship between eyepiece diopter settings and stereo range settings. Tufts College project: Research on fatigue in service jobs, report I6. Aug 1943.  
16p Mi \$.50 Ph \$2.00.
- OSRD 1731 PBL 19506 (I-1348)  
Jefferies, Zay  
Advisory report on the effect of impurities in aluminum alloys (NA-119). Aug 1943.  
42p Mi \$.50 Ph \$3.00.

## Bibliography

23

- OSRD 1732 PBL 6560 (I-583)  
Bushell, A. H.  
Final report on "Field kit, screening, for  
the detection of chemical warfare agents in  
water," to Aug. 20, 1943. 1943.  
22p illus. MI \$.50 Ph \$2.00.
- OSRD 1735 PBL 20177 (I-1428)  
McIntyre, G. M., and Bryant, E. E.  
Development of a suitable and noncritical  
fused inorganic coating for steel canteens and  
eating utensils (ZMC-18). Progress report  
Apr 5 to Jul 15, 1943. Aug 1943.  
27p graphs. MI \$.50 Ph \$2.00.
- OSRD 1737 PBL 18367 (2-178)  
Lindley, Dona, B.  
Memorandum on radar operator training: re-  
sults of study of 270-71 operators-in-  
training at Drew Field. Research Report I.  
Aug 1943.  
8p graphs. MI \$.50 Ph 1.00.
- \* OSRD 1738 PBL 20293 (2-467)  
Greenberg, H. J., and Prager, W.  
On the pressure inside the Willium gage.  
Aug 1943.  
13p graphs. MI \$.50 Ph \$1.00.
- OSRD 1739 PBL 32192 (2-52)  
Standard Oil and Gas Co., Exploration Research  
Laboratory, Tulsa, Okla.  
Development of explosion pressure gauges and  
recording equipment. Progress report, Jul 23,  
1943. Aug 1943.  
44p diagrs, photos. MI \$1.00 Ph \$3.00.  
See also PB 22875.
- OSRD 1742 PBL 15898 (I-939)  
Hildorf, W. G., and others  
Control of basic open hearth practice in  
manufacture of wrought gun tubes. Progress  
report. Aug 1943.  
21p charts. MI \$.50 Ph \$2.00.
- OSRD 1743 PBL 6700 (I-809)  
Yee, John H., and Lindsley, Charles H.  
A continuous thermometric apparatus for  
carbon monoxide detection. Jun 1943.  
17p MI \$.50 Ph \$2.00.
- OSRD 1744 PBL 15854 (I-1413)  
Chapman, E. C., and others  
Armor welding electrodes; Part I. Development  
of ferritic electrodes for welding of armor  
plate, by E. C. Chapman and R. E. Lorentz, Jr.  
Part II. Additional tests of ferritic armor  
welding electrodes, by G. S. Mikhalev and  
J. H. Humberstone. Special progress report,  
Aug 10, 1943. Aug 1943.  
22p curves, photos, tables.  
MI \$2.50 Ph \$15.00.
- OSRD 1751 PBL 27133 (2-353)  
Newmark, M. M., and Richard, F. E.  
Impact tests of reinforced concrete beams,  
II. Aug 1943.  
61p MI \$2.00 Ph \$5.00.
- OSRD 1752 PBL 6541 (I-534)  
Dupont De Nemours, E. I., and Co.  
Use of crude white arsenic in present  
Chemical Warfare Service arsenic trichloride  
process. 1943.  
28p MI \$.50 Ph \$2.00.
- OSRD 1753 PBL 22594 (I-1492)  
Henderson, A. S., and others
- PBL 6560 (I-583) Examination of enemy material (OD-113): Metallurgical and chemical examination of German 7.9 cm. cartridge link belts. Progress report I. Aug 1943.  
10p tables, photos. MI \$.50 Ph \$1.00.
- OSRD 1755 PBL 30743 (2-554)  
Martin, F. J., and others  
The effect of particle size on the detona-  
tion velocity of ammonium picrate. Progress  
report. Aug 1943.  
12p graphs. MI \$1.00 Ph \$1.00.
- OSRD 1756 PBL 16753 (I-1411)  
Schuh, A. E., and Boyles, Alfred  
Improvements in and extension of centrifugal  
casting methods for production of miscellaneous  
war material items (OD-108). Progress report,  
Jul 31, 1943. Aug 1943.  
40p photos. MI \$.50 Ph \$3.00.
- OSRD 1758 PBL 16474 (I-1322)  
Gillett, H. M., and others  
Flash welding of alloy steels for ordnance  
(OD-86). Progress report, Apr 15 to Jul 15,  
1943 Aug 1943.  
63p photos, tables.
- OSRD 1761 PBL 40623 (3-637)  
Christensen, R. J., and others  
The discrimination of transducers against  
reverberation. May 1943.  
10p MI \$1.00 Ph \$2.00.
- OSRD 176 PBL 5603 (I-502)  
Massachusetts Institute of Technology, Servo  
Mechanisms Laboratory  
Hydraulic remote control for 37 and 40 mm.  
gun mounts. 1943.  
135p Ph \$9.00 MI \$.50.
- OSRD 1764 PBL 21138 (I-1508)  
Barber-Colman Company, Rockford, Ill.  
M5A1E1 modification of the M or M5A1 direc-  
tor for intermediate calibre AA guns. Jul  
1943.  
32p photos, diagrs. MI \$.50 Ph \$3.00.
- OSRD 1765 PBL 21137 (I-1423)  
Weiss, H. K.  
An anti-aircraft computing sight. Aug 1943.  
24p MI \$.50 Ph \$2.00.
- OSRD 1766 PBL 39718 (3-425)  
Christensen, R. J., and others  
Bottom reverberation: Dependence on  
frequency. Jun 1943.  
19p graphs, drawings, map. MI \$1.00 Ph \$2.00.  
See also PB 39716.
- OSRD 1768 PBL 16759 (I-1109)  
Boegehold, A. D., and Weirman, E. M.  
Heat treatment of national emergency steels  
for use in tanks, combat cars, gun mounts and  
other ordnance materiel (OD-116). Progress re-  
port, April-Jun 1943. Sep 1943.  
29p photos. MI \$.50 Ph \$2.00.
- OSRD 1769 PBL 12146 (I-1294)  
The Psychological Corporation  
A speech interview for the selection of  
telephone talkers. Aug 1943.  
24p tables. MI \$.50 Ph \$2.00.
- OSRD 1770 PBL 34780 (2-890)  
Graham, C. H., and others
- A report of research on selection tests at  
the U. S. Submarine Base, New London. June 1943.  
7p MI \$2.00 Ph \$5.00.
- OSRD 1771 PBL 15608 (I-986)  
Hills, Gordon F.  
Use of aminated phenol formaldehyde xerogels  
as gas adsorbents. Progress report. Sep 1943.  
18p charts, tabs.  
MI \$.50 Ph \$2.00.
- OSRD 1772 PBL 5580 (I-500)  
Comings, Edward W., and others  
Progress report on "Development of the SN  
screening smoke mixture" to May 1, 1943. 1943.  
83p illus. Ph \$6.00 MI \$1.00.
- OSRD 1776 PBL 27545 (2-110)  
Richardson, M. S., and Weid, A. C.  
Analyses of operation of the universal  
magnetometer head. Aug 1943.  
56p diagr., graphs. MI \$2.00 Ph \$4.00.
- OSRD 1780 PBL 15631 (I-1062)  
Willg, E. O., and Flagg, John F.  
Analyses of base charcoals. Progress report  
to June 11, 1943. Sep 1943.  
13p MI \$.50 Ph \$1.00.
- OSRD 1781 PBL 6556 (I-505)  
Viteles, Morris S., and others  
University of Pennsylvania unit lesson plans  
for 4-day course in 40 mm. gunnery. 1943.  
8p MI \$.50 Ph \$1.00.
- OSRD 1782 PBL 22595 (I-1492)  
Henderson, A. S., and others  
Examination of enemy material (OD-113):  
A metallurgical examination of a duplex welded  
75 mm. German A.P.-H.E.-C.-B.C. projectile and  
a 75 mm. German H.E. projectile manufactured  
1942. Progress report 15, Aug 16, 1943. Sep  
1943.  
26p tables, photos. MI \$.50 Ph \$2.00.
- OSRD 1785 PBL 68224 (4-967)  
Gulf Research and Development Co., Pittsburgh,  
Pa.  
Experimental investigations in connection  
with May 15, 1943. May 1943.  
134p photos, diagrs, graphs.  
MI \$3.00 Ph \$9.00.
- OSRD 1786 PBL 28537 (2-219)  
U. S. National Defense Research Commission  
General review of projects and symposium on  
optical plastics. Minutes of meeting, May 6,  
1943. Aug 1943.  
62p MI \$2.00 Ph \$5.00.
- OSRD 1787 PBL 6699 (I-906)  
Yee, John H.  
A photoelectric instrument for the colorimetric  
detection and determination of carbon mon-  
oxide. To Aug. 20, 1943. Sep 1943.  
28p illus. MI \$.50 Ph \$2.00.
- OSRD 1788 PBL 40535 (3-422)  
Princeton University, Ballistic Research Group,  
and Duke University, Ballistic Research Group  
Deformable projectiles for flexible gunnery  
training. Sep 1943.  
39p diagrs, tables. MI \$1.00 Ph \$3.00.
- OSRD 1789 PBL 27301 (2-613)  
Imus, H. A.  
The relationship between test scores obtained  
on the single and multiple projection  
elikometers. Aug 1943.  
7p tables. MI \$1.00 Ph \$1.00.

## Bibliography

- OSRD 1791 PBL 19497 (I-1248)  
Dorn, John E., and Bellaseyus, A. C.  
Formability of magnesium alloy sheet  
(NA-146): Progress report from Apr 11, 1943 to Jul 10, 1943. Sep 1943.  
32p Mi \$.60 Ph \$3.00.
- OSRD 1792 PBA 6695 (I-478)  
Henne, Albert L.  
Final report on "Fluorocarbons and related compounds" to June 1943. 1943.  
13p Ph \$1.00 Mi \$.50.
- OSRD 1797 PBA 6812 (I-782)  
Hamilton, Cliff S.  
"Organic Arsenicals." Jul 1943.  
52p Mi \$1.00 Ph \$4.00.
- OSRD 1799 PBL 18476 (I-1347)  
Criffis, LeVan  
The behavior of longitudinal stress waves near discontinuities in bars of plastic material. Sep 1943.  
84p Mi \$1.00 Ph \$6.00.
- OSRD 1801 PBL 27148 (2-298)  
Hirschfelder, J. O., and others  
Interior ballistics of recoilless guns. Sep 1943.  
33p tables. Mi \$1.00 Ph \$3.00.
- OSRD 1804 PBA 30748 (2-626)  
Elderfield, Robert C.  
The preparation of pentaerythritol. Progress report. Sep 1943.  
18p Mi \$1.00 Ph \$2.00.
- OSRD 1805 PBL 22651 (2-253)  
Woodfall, W. W., and others  
Research on sound control: 1, Thin headphone for use under M-1 helmet; 2, German handset HAP-2; 3, Submarine voice tube system. Sep 1943.  
36p drawings, graphs, photom. Mi \$.50 Ph \$3.00.
- OSRD 1807 PBL 61406 (4-1138)  
Buckthal, E. P., and Cummings, K. M.  
Precipitation static research. Final report. Aug 1943.  
95p photos, graphs. Mi \$1.00 Ph \$7.00.
- OSRD 1809 PBL 16763 (I-1252)  
Macconochie, Arthur F., and others  
Advisory report on the Mathematics underlying the centrifugal casting of metals (OD-108). Aug 1943-Sep 1943.  
44p charts. Mi \$.50 Ph \$3.00.
- OSRD 1813 PBL 18368 (I-1548)  
Lindsey, D. B.  
Preliminary report of results from oscilloscope operator tests, experimental edition. (Selection and training of oscilloscope operators, memorandum No. 4.) n.d.  
7p graphs, tables. Mi \$.50 Ph \$1.00.
- OSRD 1814 PBL 16417 (I-1150)  
Sinclair, George  
C-11 antenna patterns for aircraft. Covering studies and experimental investigations in connection with antenna patterns for aircraft and tanks, and the measurement of impedances, by means of models. Aug 1943.  
104p diagrs, drawings, photos. Mi \$.50 Ph \$7.00.
- OSRD 1815 PBL 30762 (2-585)  
Sage, C. G.  
Variation of burning properties of composite propellants with temperature. Progress report. Aug 31, 1943. Sep 1943.  
15p graphs, tables. Mi \$1.00 Ph \$1.00.
- OSRD 1816 PBL 19773 (I-1443)  
Egan, J. P., and others  
Speech and sound transmission through gas masks. Sep 1943.  
55p photos. Mi \$1.00 Ph \$4.00.
- OSRD 1817 PBL 22905 (2-180)  
Wiener, Francis M., and others  
Design, operation and calibration of the sound pressure meter. Sep 1943.  
54p diagrs, photos. Mi \$1.00 Ph \$5.00.
- OSRD 1818 PBL 40530 (3-414)  
Finch, Dan H., and Dorn, John E.  
Properties and heat treatment of magnesium alloys: Part I. The effect of size upon tensile properties of specimens of magnesium alloy sheet (NA144). Final report. Sep 1943.  
69p tables, graphs, photomicrographs. Mi \$2.00 Ph \$5.00.  
See also PB 40531-40534.
- OSRD 1819 PBL 40531 (3-415)  
Merriam, J. L., and Dorn, John E.  
Properties and heat treatment of magnesium alloys: Part II. Notch sensitivity of magnesium alloys (NA144). Final report, Jun 1943. Sep 1943.  
73p graphs, tables, photomicrographs. Mi \$2.00 Ph \$5.00.  
See also PB 40530, 40532-40534.
- OSRD 1820 PBL 40532 (3-416)  
Jelinek, Julius J., and Dorn, John E.  
Properties and heat treatment of magnesium alloys: Part III. Damping capacity of magnesium alloys (NA144). Final report, Jun 15, 1943. Sep 1943.  
71p graphs, tables, photos. Mi \$2.00 Ph \$5.00.  
See also PB 40530-40531-40533-40534.
- OSRD 1821 PBL 40533 (3-414)  
Flanigan, Alan E., and others  
Properties and heat treatment of magnesium alloys: Part IV. Heat treatment of magnesium alloys (NA144). Final report, Jun 15, 1943. Sep 1943.  
80p drawings, graphs, photomicrographs. Mi \$2.00 Ph \$6.00.  
See also PB 40530-40532 and 40534.
- OSRD 1823 PBL 12147 (I-1198)  
Snidecor, John C.  
A preliminary study of the abilities of rated men to judge speaking performance. Aug 1943.  
10p Mi \$.50 Ph \$1.00.
- OSRD 1824 PBL-6534 (I-602)  
McKee, Ralph W., and others  
Progress report on "The action of mustard gas on certain enzymatic reactions." 1943.  
13p Mi \$.50 Ph \$1.00.
- OSRD 1825 PBL 6533 (I-430)  
Ormbee, Richard A., and others  
Progress report on "A study of the fixed mustard in skin tissues." 1945.  
14p Ph \$1.00 Mi \$.50.
- OSRD 1826 PBA 6535 (I-682)  
Kunitz, M.  
Progress report on "Crystalline Hexokinase (Heterophosphate)." Sep 1943.  
22p illus. Mi \$.50 Ph \$2.00.
- OSRD 1827 PBL 20285 (2-55)  
Snidecor, John C., and Fairbanks, Grant  
The selection of telephone talkers. A manual for the training of interviewers, memorandum 2. n.d.  
20p Mi \$.50 Ph \$2.00.
- OSRD 1828 PBL 18472 (I-1246)  
Duwez, P. E., and others  
The behavior of long beams under impact loading. Sep 1943.  
63p Mi \$1.00 Ph \$5.00.
- OSRD 1829 PBL 18473 (I-1249)  
Duwez, P. E., and others  
Discussion of energy measurements in tension impact tests at the California Institute of Technology. Sep 1943.  
29p diagrs, tables, graphs. Mi \$.50 Ph \$2.00.
- OSRD 1830 PBL 15861 (I-939)  
Lorig, C. H., and others  
Effects of hydrogen, nitrogen, and oxygen in armor plate. Final report, Sep 16, 1943. Part I—Fractional vacuum fusion analysis of rolled and cast armor plate samples. Sep 1943.  
15p Mi \$.50 Ph \$1.00.
- OSRD 1831 PBL 15602 (I-1309)  
Dramhall, E. H., and Seaton, S.-L.  
Summary report on College (Alaska) Observatory July 1942, through June 4, 1943: results of ionospheric and signal-intensity measurements affecting radio wave-propagation. Sep 1943.  
27p Mi \$.50 Ph \$2.00.
- OSRD 1833 PBL 16734 (I-1043)  
Dunham, Theodore, Jr.  
Minutes of Conference on research conducted in the Canal Zone on the fouling of optical instruments. Jul 1943.  
38p Mi \$.50 Ph \$3.00.
- OSRD 1836 PBL 18855 (2-50)  
Kincald, J. F., and Dailey, B. P.  
An apparatus for the arrested burning of gun propellants. Progress report, Sep 22, 1943. Sep 1943.  
13p drawings, photos, tables. Mi \$.50 Ph \$1.00.
- OSRD 1837 PBL 18856 (I-1376)  
Corey, Robert B., and others  
Chromatographic studies of smokeless powders and related substances. Progress report. Sep 1943.  
89p diagrs. Mi \$1.00 Ph \$6.00.
- OSRD 1839 PBL 23725 (2-528)  
Columbia University. Applied Mathematics Group  
The evaluation of integrals arising in exponential delay averages. Sep 1943.  
27p Mi \$.50 Ph \$2.00.
- OSRD 1840 PBL 15897 (I-940)  
Trotano, Alexander R.  
An investigation of the metallographic and physical properties of new types of gun steels. Progress report. Sep 1943.  
26p photom. Mi \$.50 Ph \$2.00.

## Bibliography

25

- OSRD 1841 PBL 15877 (I-937)  
Fetters, K. L., and others  
Improvement in gun steel ingot practice.  
Progress report. Sep 1943.  
109p graphs. MI \$1.50 Ph \$8.00.
- OSRD 1843 PBL 16747 (I-1112)  
Mehl, Robert F., and Grobe, Arthur H.  
On acceptance tests for plain carbon steel  
gun forgings and other ordnance forgings  
(OD-114). Progress report May 1-Aug 1, 1943.  
Sep 1943.  
27p photos, tabs. MI \$.50 Ph \$2.00.
- OSRD 1844 PBL 19833 (I-1580)  
Wyman, L. L., and Pasch, D.  
Centrifugal and precision casting of  
non-ferrous alloys: Methods of precision  
casting of metals. Advisory report. Sep 1943.  
43p drawings, photos. MI \$.50 Ph \$3.00.
- OSRD 1847 See OSRD 1876.
- OSRD 1849 See OSRD 4119.
- OSRD 1850 PBA 9397 (I-603)  
Diehl, Harvey  
Final report on "Development of oxygen-  
carrying chemicals." 1943.  
5p. MI \$1.00 Ph \$4.00.
- OSRD 1851 PBL 9387 (I-760)  
Bliss, Harding  
Progress report on "Results of tests on  
regenerators," to August 1, 1943. Sep 1943.  
50p illus. MI \$.50 Ph \$4.00.
- OSRD 1853 PBL 22596 (2-44)  
Henderson, A. S., and others  
Examination of enemy material (OD-113):  
Metallurgical examination of German (Rhein-  
metall) aerial bomb fuzes. Progress report 16,  
Sep 1, 1943. Sep 1943.  
26p photos, tables. MI \$.50 Ph \$2.00.
- OSRD 1856 PBA 15629 (I-986)  
McCabe, Warren L., and others  
The preparation of wood charcoal suitable  
for activation. Progress report to August 1943.  
Sep 1943.  
92p tables, graphs, diagrs. MI \$1.00 Ph  
\$7.00.
- OSRD 1857 PBL 944 (I-144)  
Latter, Prof. V. K.  
Verification of Mie Theory-Calculations  
and Measurements of Light Scattering by  
Dielectric Spherical Particles.  
97p MI \$1.00 Ph \$7.00.
- OSRD 1858 PBL 19521 (2-39)  
Russell, H. W.  
Fatigue properties of magnesium alloys and  
structures: Fatigue properties of magnesium  
alloy sheet. Progress report, Jun 7, 1943.  
Sep 1943.  
78p diagrs, photos. MI \$1.00 Ph \$6.00.
- OSRD 1859 PBL 16478 (I-1246)  
Poirier, W. M., and Anderson, E. A.  
Prevention of stress-corrosion cracking  
of cartridge brass by protective coatings or  
surface treatment (OD-25): Progress report,  
May 16-Aug 15, 1943. Sep 1943.  
12p MI \$.50 Ph \$1.00.
- OSRD 1862 PBL 31018 (2-951)  
Proudfoot, D. A.  
Underwater sound survey, New York Harbor  
approaches. Completion report, Aug 1943.  
41p maps, diagrs, photos, graphs. MI \$1.00  
Ph \$3.00.
- OSRD 1864 PBL 28617 (2-344)  
Silverman, Leslie, and others  
Fundamental factors in the design of  
protective respiratory equipment, the  
characteristics of inspiratory and expiratory  
valves. Progress report. Aug 1943.  
97p graphs, tables. MI \$2.00 Ph \$7.00.
- OSRD 1865 PBL 22597 (2-44)  
Grenfell, L. H., and others  
Examination of enemy material (OD-113):  
A survey of various German ammunition carriers.  
Progress report 17. Sep 2, 1943. Sep 1943.  
25p photos. MI \$.50 Ph \$2.00.
- OSRD 1866 PBL 28618 (2-468)  
Lewis, W. K., and Wolff, F. A.  
Instantaneous penetration measurements under  
conditions approximating human respiration.  
Final report. Oct 1943.  
36p diagrs, curves. MI \$1.00 Ph \$3.00.
- OSRD 1868 PBL 18873 (2-35)  
Bridgeman, P. W.  
Plastic deformation of steel under high  
pressure. Third progress report. Sep 1943.  
26p diagrs, photos, tabs. MI \$.50 Ph \$2.00.
- OSRD 1869 Pb. 5213 (I-438)  
Knapp, Robert T.  
Water tunnel tests of the 60 mm. mort.  
projectile. 1943.  
25p illus. Ph \$2.00 MI \$.50.
- OSRD 1870 PBL 27550 (2-109)  
Gulf Research and Development Company, Pitts-  
burgh, Pa.  
Application of sensitive magnetic devices to  
detection of submarines from aircraft. Final  
report, Jul 1, 1942. Sep 1943.  
16p photos, diagr. MI \$1.00 Ph \$2.00.
- OSRD 1871 PBL 39579 (3-413)  
Cross, Howard C.  
Heat resisting metals for gas turbine parts  
(H-102). Progress report, Apr 2-Aug 31, 1943.  
Oct 1943.  
117p photomicrographs, tables. MI \$3.00  
Ph \$8.00.
- OSRD 1872 PBL 32201 (2-803)  
Pierce, W. C., and others  
A meter for the calibration of breather  
pumps. Progress report. Aug 20, 1943.  
Oct 1943.  
9p drawings, tables. MI \$1.00 Ph \$1.00.
- OSRD 1876 PBL 33352 (2-747)  
Benford, J. R., and Wells, G. L.  
Superposed image range finder. Progress  
reports, I, 2, and 3. May 1942-Feb 1944.  
PB OSRD PR P MI Ph  
33352 1876 1 30 \$1.00 \$2.00  
33353 1847 2 41 1.00 3.00  
33354 3317 3 23 1.00 2.00  
See also OSRD 5150
- OSRD 1879 PBL 23727 (2-309)  
Columbia University. Applied Mathematics Group  
On the orientation and magnification of an  
airplane model for movies. Sep 1943.  
39p diagrs. MI \$.50 Ph \$3.00.
- OSRD 1889 PBL 22552 (2-170)  
Wallace, R. L., Jr., and others  
Submarine voice tube systems. Oct 1943.  
55p curves, diagrs, photos. MI \$1.00  
Ph \$4.00.
- OSRD 1890 PBL 40629 (3-497)  
Shapley, A. H., and Wells, H. W.  
Correlation of solar and geomagnetic  
observations, with conditions of the iono-  
sphere. Final reports on project No. C-53,  
Jul 1942, through Jun 1943. Sep 1943.  
24p tables, photos, graphs. MI \$1.00  
Ph \$2.00.
- OSRD 1891 PBA 30748 (2-630)  
Campbell, Kenneth H.  
The addition of oxides of nitrogen to ethyl-  
ene. Progress report. Sep 15, 1943. Oct 1943.  
16p MI \$1.00 Ph \$2.00.
- OSRD 1892 PBL 5932 (I-475)  
Bartlett, Paul D., and others  
Progress report on "A kinetic study of  
ethyl-bis-B-chloroethylamine (HN-1) in water-  
acetone solutions and a comparison with other  
Bichloroethylamines," to June 10, 1943. 1943.  
29p Ph \$2.00 MI \$.50.
- OSRD 1893 PBA #205 (I-351)  
Carver, E. K., and Van Wazer, John, Jr.  
Rheological measurements on thickened  
vesicants. 1943.  
27p illus. Ph \$2.00 MI \$.50.
- OSRD 1899 PBA 6536 (I-682)  
Gelling, E. M. K.  
Progress report on "A modification of the  
"Drod" to 14 September 1943.  
10p Ph \$1.00 MI .50.
- OSRD 1906 PBL 11210 (I-837)  
Heim, H. J., and Webb, R. C.  
Design and construction of cathode ray  
oscillograph. Progress Report No. 2. Nov 1943.  
15p illus. MI \$.50 Ph \$2.00.
- OSRD 1907 PBL 8337 (I-609)  
Hoggins, W. H.  
A final report on precipitation-static-  
reduction research, for the period June 15,  
1941 to March 31, 1943. 1943.  
147p MI \$1.00 Ph \$10.00.
- OSRD 1911 PBL 6521 (I-695)  
Hamilton, Joseph G., and Axelrod, Dorothy  
Progress report on "Determination of the  
distribution of H and L in skin and eye tissues  
by Radio-autographic techniques." Oct 1943.  
32p MI \$.50 Ph \$3.00.
- OSRD 1913 PBL 9394 (I-760)  
Hack, Clifford, and Diehl, Harvey  
Progress Report on "A circulating solid  
apparatus for manufacture of oxygen." to May  
20, 1943. Jun 1943.  
112p illus.
- OSRD 1915 PBL 18475 (I-1276)  
Wilbur, John B.  
The analysis of elastic structures acted  
upon by impulsive loadings. Sep 1943.  
110p MI \$1.50 Ph \$3.00.
- OSRD 1918 PBL 33265 (2-1008)  
Scheffé, Henry  
Theory of probability with applications.  
Feb 1944.  
112p curves, tables. MI \$3.00 Ph \$8.00.

## Bibliography

- OSRD 1919 PBL 22906 (2-865)  
Abrams, M. H., and Karlin, J. E.  
Vocabularies for military communication in  
noise. Aug 1943.  
115p tables. Mi \$1.50 Ph \$8.00.
- OSRD 1924 PBL 43032 (3-866)  
Rose, A.  
Improved sensitivity of television equip-  
ment. Progress report, Nov 1942-Jul 1943.  
Jul 1943.  
11p drawings. Mi \$1.00 Ph \$1.00.  
For final report see PB 43036.
- OSRD 1926 PBL 21126 (2-25)  
Bichowsky, F.R.  
Studies and investigation in connection with  
the possibility of increasing the capacity of  
load storage batteries by modification of the  
negative plate. Final report, Jun 1, to Oct 1,  
1942. Oct 1943.  
76p Mi \$1.00 Ph \$6.00.
- OSRD 1927 See OSRD 1524.
- OSRD 1928 PBL 27546 (2-110)  
Richardson, M. S., and Meid, A. C.  
A general type of operation of the universal  
magnetometer head. Sep 1943.  
35p curves, tables. Mi \$1.00 Ph \$3.00.
- OSRD 1929 PBL 39717 (3-426)  
Johnson, Martin W.  
A survey of biological underwater noises off  
the coast of California and in Upper Puget  
Sound. Sep 1943.  
12p maps. Mi \$1.00 Ph \$1.00.
- OSRD 1930 PBL 27547 (2-110)  
Richardson, M. S., and Meid, A. C.  
Operation of the universal magnetometer head  
with linear non-ideal control mechanism. Sep  
1943.  
13p curves. Mi \$1.00 Ph \$1.00.
- OSRD 1931 PBL 12025 (1-1196)  
Psychological Corporation, N. Y.  
A study in training classification petty  
officers to select telephone talkers. Nov 1943.  
13p Mi \$.50 Ph \$1.00.
- OSRD 1934 PBL 27337 (2-441)  
McCormick, W. W., and Madansky, L.  
The high intensity flash lamp, type 10, de-  
velopment and characteristics. Aug 1943.  
23p diagrs, drawings, graphs, photos. Mi  
\$1.00 Ph \$2.00.
- OSRD 1935 PBL 16749 (1-1026)  
Lorig, C. H., and others  
An analysis of heat flow in metal molds for  
centrifugal casting of gun tubes, airplane cyl-  
inders, tank bogey wheels, and other war mate-  
rials (OD-108). Final report, Oct 1943-Aug  
1943. Oct 1943.  
125p photos, diagrs, graphs. Mi \$1.50 Ph  
\$9.00.
- OSRD 1938 See OSRD 4052.
- OSRD 1939 PBL 27345 (2-441)  
McCormick, W. W., and Madansky L.  
The microflash lamp, type 200, development  
and characteristics. Aug 1943.  
17p diagrs, drawings. Mi \$1.00 Ph \$2.00.
- OSRD 1940 See OSRD 3143.
- OSRD 1941 PBL 15884 (1-1185)  
Lorig, C. H., and others  
Effects of hydrogen nitrogen and oxygen in  
armor plate Part II. Aluminum nitride as an  
intergranular precipitate (OD-38-2). Final  
report, Aug 1942-Sep 1943. Oct 1943.  
45p photos, tables. Mi \$.50 Ph \$3.00.
- OSRD 1942 PBL 22598 (2-46)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113):  
Metallurgical examination of Japanese 37 mm.  
round nose, A. P. ammunition. Progress report  
18, Sep 9, 1943. Oct 1943.  
28p charts, photos. Mi \$.50 Ph \$2.00.
- OSRD 1946 PBL 24883 (2-250)  
Cork, J. M.  
Report on the magnetic disc plating derived  
under contract No. ODMar-254. Dec 1943.  
10p Mi \$.50 Ph \$1.00.
- OSRD 1948 PBL 19779 (2-321)  
Buehl, Walter M., and Seubert, John E.  
Peroxide oxygen generator: Final report to  
Oct 1943. Oct 1943.  
26p diagr. Mi \$.50 Ph \$2.00.
- OSRD 1950 PBL 19511 (2-39)  
Thomsen, E. G., and others  
Properties and heat treatment of Magnesium  
alloys (MA-144) Progress report: Aug 5, 1943.  
Oct 1943.  
40p curves, tables. Mi \$.50 Ph \$4.00.
- OSRD 1951 PBL 9395 (1-504)  
DuPont de Nemours, E. I., and Company  
Final report on "Analysis and degradation  
study of salcomine." 1943.  
59p Mi \$1.00 Ph \$4.00.
- OSRD 1952 PBL 4634 (1-370)  
Elliot, D. C.  
Design and development of large experimental  
flame thrower. 1943.  
122p illus. Ph \$9.00 Mi \$1.50.
- OSRD 1956 See OSRD 4119.
- OSRD 1958 PBL 6697 (1-827)  
Yoe, John H., and others  
Carbon monoxide indicators of the impreg-  
nated silica gel type. Progress report to Sep  
20, 1943. Oct 1943.  
37p illus. Mi \$.50 Ph \$1.00.
- OSRD 1959 PBL 6698 (1-827)  
Yoe, John H.  
Studies in carbon monoxide detection. Final  
report to Oct 6, 1943. Nov 1943.  
50p illus. Mi \$.50 Ph \$4.00.
- OSRD 1960 PBA 6537 (1-602)  
Loder, D. J.  
Progress report on "New methods for synthe-  
sizing Alkanolamines for use in vesicants.  
Exploratory studies on the synthesis of Eth-  
anolamines from Formaldehyde and hydrogen cya-  
nide." to May 11, 1943. 1943.  
95p Mi \$1.00 Ph \$7.00.
- OSRD 1961 PBA 6553 (1-682)  
Loder, D. J.  
Final report on "New methods for synthesiz-  
ing alkanolamines for use in Vesicants. Syn-  
thesis of Ethanolamines
- by continuous Hydrogenation from Formaldehyde  
and Hydrogen Cyanide." Nov 1943.  
36p Mi \$.50 Ph \$3.00.
- OSRD 1963 PBL 22599 (2-44)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113): A  
metallurgical examination of a track link and  
typical bearings from German tanks. Progress  
report 19, Sep 20, 1943. Oct 1943.  
27p tables, photos. Mi \$.50 Ph \$2.00.
- OSRD 1966 PBL 22600 (2-46)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113):  
Metallurgical study of two samples of Japanese  
welded homogenous light armor. Progress report  
20, Sep 27, 1943. Oct 1943.  
15p photos. Mi \$.50 Ph \$1.00.
- OSRD 1969 PBL 27349 (2-576)  
Hippel, Arthur von, and others  
A new electrolytic selenium photocell. Jun  
1943.  
32p drawings, graphs. Mi \$1.00 Ph \$3.00.
- OSRD 1971 PBL 16760 (1-1112)  
Taylor, Howard F.  
Bibliography on Centrifugal casting of metal  
(OD-108). Final report Oct 1943.  
111p Mi \$1.50 Ph \$8.00.
- OSRD 1972 PBL 15846 (1-1258)  
Hildorf, W. G., and others  
Control of basic open hearth practice in  
manufacture of wrought gun tubes (OD-34-3).  
May 1-Jul 31, 1943. Oct 1943.  
50p charts, graphs, tables. Mi \$.50 Ph \$4.00.
- OSRD 1973 PBL 22908 (2-170)  
Waterman, T. H.  
Flight and laboratory tests of various mi-  
crophones and noise shields for use at low al-  
titudes. Dec 1943.  
36p graphs, photos, tables. Mi \$.50 Ph \$3.00.
- OSRD 1974 PBL 22909 (2-165)  
Kryter, K. D., and Ross, D. A.  
Articulation-test comparisons of six Signal  
Corps interphones at low and high altitudes.  
Mar 1944.  
63p Mi \$1.00 Ph \$5.00.
- OSRD 1975 PBL 22911 (2-325)  
Licklider, J. C. R., and Ross, D. A.  
Voltage gain and power-output capability re-  
quirements for high-altitude interphone ampli-  
fiers. Mar 1944.  
64p curves, diagrs. Mi \$1.00 Ph \$5.00.
- OSRD 1976 PBL 5505 (1-480)  
Licklider, J. C. R., and Kryter, K. D.  
Articulation tests of standard and modified  
interphones conducted during flight at 5,000  
and 35,000 feet, with appendices concerning:  
(1) Interphone signal levels under various  
conditions; (2) temperatures encountered on high  
altitude missions; and (3) articulation in a  
B-26 bomber as a function of air speed. 1944.  
93p illus. Ph \$7.00 Mi \$1.00.
- OSRD 1977 PBL 22910 (2-325)  
Dienel, H. F.  
Sound levels in U. S. military airplanes at  
low and high altitudes. Dec 1943.  
81p drawings, graphs, photos, tables. Mi  
\$1.00 Ph \$6.00.

## Bibliography

27

- OSRD 1982 PBL 32204 (2-803)  
Pierce, W. C., and others  
Apparatus for evaluating the maximum inspiratory and expiratory resistances of gas masks during wearing. Progress report, Oct 1, 1943. Nov 1943.  
16p drawings, table. MI \$1.00 Ph \$1.00.
- OSRD 1983 PBA 15612 (I-1039)  
Yost, D. H., and others  
A study of smoke clouds in a coastal area; field experiments near Brownsville, Tex. (Progress report) to September 1, 1943. Nov 1943.  
31p map, tabs, graphs. MI \$.50 Ph \$3.00.
- OSRD 1987 PBL 33205 (2-747)  
Compton, R. D., and DeGroot, H.  
Motion picture photography of television images. Final report. Apr 1943.  
24p graph, photos, table. MI \$1.00 Ph \$2.00.
- OSRD 1988 PBL 15847 (I-1361)  
Wells, Cyril, and Mehl, R. F.  
Improvement in wrought gun tubes: Yield strength in wrought gun tubes; (OD-34-3); Progress report, Oct 15, 1942-Jun 30, 1943. Oct 1943.  
93p charts, curves, tables.  
MI \$1.00 Ph \$7.00.
- OSRD 1996 PBL 32193 (2-828)  
Wood, R. W.  
The interaction of shock waves. Progress report. Nov 1943.  
26p drawings, photos. MI \$1.00 Ph \$2.00.
- OSRD 1997 PBL 27544 (2-113)  
Vauquier, V., and Tolles, M.  
Compensation of AN/ASQ-2 installation in Army B-18 bomber No. 7470. Nov 1943.  
29p graphs, drawing. MI \$1.00 Ph \$2.00.
- OSRD 2003 PBL 31954 (2-867)  
Kassel, Louis S., and Gerald, Curtis, F.  
Purification of Leavenstein mustard by crystal fractionation. Final report, Oct 1943. Nov 1943.  
57p tables, graphs. MI \$2.00 Ph \$4.00.
- OSRD 2004 PBL 22601 (2-43)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113): Metallurgical examination of a 98-K Mauser rifle of 1941. Progress report 21, Oct 11, 1943. Nov 1943.  
14p photos. MI \$.50 Ph \$1.00.
- OSRD 2007 PBL 20178 (I-1429)  
McIntyre, G. H., and Bryant, E. E.  
Development of a suitable and noncritical fused inorganic coating for steel canteens and other Quartermaster's items. Progress report, Jul 15, to Oct 15, 1943. Nov 1943.  
17p MI \$.50 Ph \$2.00.
- OSRD 2010 PBL 21123 (I-1514)  
Hill, G. A., and Clarke, R. G.  
Improvement of photoflash bombs: Progress report. Nov 1943.  
37p drawings, graphs. MI \$.50 Ph \$3.00.
- OSRD 2016 PBA 18862 (2-323)  
Office of Scientific Research and Development.  
- The preparation of nitroparaffins: Final report: Dec 11, 1942. Nov 1943.  
18p MI \$.50 Ph \$2.00.  
(See also OSRD 154, OSRD 830.)
- OSRD 2017 PBL 32724 (3-167)  
Heese, G. E.  
Report on two field demonstrations showing the use of certain infrared equipment for night amphibious operations. Apr 1943.  
28p maps, photos. MI \$1.00 Ph \$2.00.
- OSRD 2018 PBL 18883 (I-1578)  
Hyers, D. H.  
On the static and dynamic plastic bending of plates. Nov 1943.  
26p graphs. MI \$.50 Ph \$2.00.
- OSRD 2020 PBL 33378 (2-938)  
Barnett, C. E., and Fundis, G. W.  
Luminescent markings for ammunition and other supply cases to provide legibility under blackout conditions. Progress report, Nov 23, 1942-Mar 25, 1943. Mar 1943.  
17p MI \$1.00 Ph \$2.00.
- OSRD 2021 PBL 33379 (2-1008)  
New Jersey Zinc Co. of Pennsylvania  
Two interim reports on luminescent materials: Report No. I. Usefulness of luminescent markings in the unloading of a ship under blackout conditions; Feb 4, 1943, by C. E. Barnett; Report No. II. Visual thresholds at low brightness, by L. J. Reimert. Progress report. Jan 25-Feb 28, 1943. Feb 1943.  
32p graphs, drawings. MI \$1.00 Ph \$3.00.
- OSRD 2022 PBL 32186 (2-826)  
Kirkwood, John G., and others  
The pressure wave produced by an underwater explosion: Part V. Progress report. Nov 1943.  
222p curves, tables. MI \$5.00 Ph \$15.00.
- OSRD 2023 PBL 32187 (2-827)  
Rice, O. K., and Ginell, Robert  
The pressure wave produced by an underwater explosion: Part VI. The case of cylindrical symmetry. Progress report. Nov 1943.  
48p tables. MI \$1.00 Ph \$4.00.
- OSRD 2024 PBL 34753 (2-895)  
Stoker, J. J.  
Strength and compressibility of pads of tubular fibres to be used in clothing. Dec 1943.  
12p diagrs. MI \$1.00 Ph \$1.00.
- OSRD 2026 PBL 34751 (3-53)  
Parlin, Ransom B., and others  
The theory of explosion initiation. Progress report. Nov 1943.  
47p MI \$1.00 Ph \$4.00.
- OSRD 2028 PBL 33376 (2-748)  
U.S. Office of Scientific Research and Development.  
Two reports on visibility of ultraviolet light sources and ranges of autocollimating reflectors: Report No. 1. Visibility of ultraviolet light sources and ranges of fluorescent retrodirectional autocollimating devices, by L. J. Reimert. Progress report, Mar 12-Apr 12, 1943; Report No. 2, Report submitted by the Institute of Optics, University of Rochester (glass and plastic collimators). Mar 30, 1943. Apr 1943.  
28p graphs, tables. MI \$1.00 Ph \$2.00.
- OSRD 2030 PBA 33377 (2-862)  
Barnett, C. E.  
Effect of temperature on the phosphorescence of alkaline earth sulfide phosphors. Progress report. Nov 6, 1942. May 1943.  
7p tables. MI \$1.00 Ph \$1.00.
- OSRD 2035 PBL 27543 (2-108)  
Columbia University Airborne Instrument Laboratory  
AN/ASQ-1 magnetic airborne detection equipment. Oct 1943.  
58p photos, illus, graphs, tab. MI \$2.00 Ph \$4.00.
- OSRD 2036 PBA 4193 (I-316)  
Broughton, G., and Byfield, A.  
The manufacture, properties and testing of napalm soaps. (For supplement see PB-5477.)  
112p MI \$1.50 Ph \$8.00.
- OSRD 2036 Supp. PBA 5477 (I-434)  
Broughton, G., and Byfield, A.  
The manufacture, properties and testing of napalm soaps. 1944.  
44p illus. Ph \$3.00 MI \$.50.
- OSRD 2037 PBL 22888 (2-164)  
Egan, J. P., and others  
Microphone and headset studies I. Nov 1943.  
72p graphs, tables. MI \$1.00 Ph \$5.00.
- OSRD 2038 PBL 22907  
Egan, J. P., and others  
Studies on the effect of noise on speech communication. Nov 1943.  
38p charts, curves, tables. MI \$.50 Ph \$3.00.
- OSRD 2039 PBL 27333 (2-576)  
Strong, John  
Sensitivities of infrared detectors. Sep 1943.  
10p MI \$1.00 Ph \$1.00.
- OSRD 2044 PBL 43061 (3-793)  
Madd, E., and Townsend, C. L.  
Improvements to television systems, under NDRC contract OBM-SR-441 (as amended). Final report. Jun 1943.  
23p diagr, drawings. MI \$1.00 Ph \$2.00.
- OSRD 2047 PBL 40554 (3-651)  
Hutchens, John O., and others  
Improved micro-apparatus for controlled toxicity determinations. Progress report, Oct 4, 1943. Nov 1943.  
20p photos, diagrs. MI \$1.00 Ph \$2.00.  
See also PB 5569.
- OSRD 2048 PBL 4647 (I-323)  
Thompson, Norman J., and Dakin, Morris  
Incendiary bomb fillings for industrial targets. 1943.  
46p illus. Ph \$4.00 MI \$.50.
- OSRD 2050 PBA 32203 (2-792)  
Rodebush, W. H., and others  
Filter penetration by aerosols of very small particle size. Progress report. Sep 1, 1943. Nov 1943.  
23p diagrs, graphs, tables.  
MI \$1.00 Ph \$2.00.
- OSRD 2055 PBL 30750 (2-552)  
Blomquist, Alfred T.  
The crystallography of Haleite (ethylenedinitramine). Final report. Nov 1943.  
27p diagr, photo. MI \$1.00 Ph \$2.00.
- OSRD 2056 PBA 6813  
Snyder, H. R.  
Final report on "The resolution of BAL" to September, 1943. 1943.  
52p MI \$1.00 Ph \$4.00.

- OSRD 2058 PBL 6571 (I-565)  
Peer, J. R., and others  
Progress report on "H-57 bomb modified for improved dispersion of H." Nov 1943.  
47p illus. MI \$.50 Ph \$4.00.
- OSRD 2061 PBL 84117 (2-987)  
U. S. National Defense Research Committee  
Comparative study of internal adjuster targets of range-and height finders. Nov 1943.  
48p diagr., graphs, tables. MI \$1.00 Ph \$4.00.
- OSRD 2062 PBL 10496 (I-1282)  
Dorn, J. E., and Ballaseyus, A. C.  
Formability of magnesium alloy sheet: Final report. Part I, Elevated temperature variable speed tensile tests on magnesium alloys (NA-148). Sep 24, 1943. Nov 1943.  
130p photos, tables, diagrs. MI \$1.50 Ph \$9.00.
- OSRD 2063 PBL 10541 (I-1501)  
Hunter, M. A., and others  
Physical and stress corrosion properties of magnesium alloy sheet (NA-147). Nov 1943.  
50p MI \$.50 Ph \$4.00.
- OSRD 2064 PBL 22602 (I-1486)  
Brenell, L. H., and others  
Examination of enemy material (OD-118): Metallurgical examination of Japanese roller-bearing assemblies from aircraft engine "Zoku." Progress report 23, Nov 1, 1943. Nov. 1943.  
17p tables, photos. MI \$.50 Ph \$2.00.
- OSRD 2065 PBL 10634 (2-40)  
Williams, R. S.  
Metallurgical studies and surveys of Army Quartermaster Corps supplies: Part I—Problems under investigation for the Office of the Quartermaster General for the period Feb 1, 1943 to Aug 1, 1943; Part II—Camouflage of mess gear (QMC-25). Final report. Nov 1943.  
15p drawing. MI \$.50 Ph \$1.00.
- OSRD 2074 PBL 43033 (3-866)  
Ross, A.  
Improved sensitivity of television equipment. Progress report, Aug-Sep 1943. Sep 1943.  
7p MI \$1.00 Ph \$1.00.  
For final report see PB 43036.
- OSRD 2075 PBL 43038 (3-865)  
Kell, R. D.  
Improved sensitivity of television equipment. Progress report No. 2, Aug 1-Oct 1, 1943. Oct 1943.  
7p diagr. MI \$1.00 Ph \$1.00.  
See also PB 43037, PB 43038.
- OSRD 2076 PBL 10547 (I-1487).  
Barrett, Charles S., and others  
Deformation characteristics of magnesium alloys (NA-148). First quarterly progress report, Jun 15 to Sep 15, 1943. Nov 1943.  
37p MI \$.50 Ph \$3.00.
- OSRD 2077 PBL 21125 (2-22)  
O'Flaherty, Fred, and others  
Improvement of leather for military uses. Progress report to Mar 15, 1943. Nov 1943.  
188p tables, graphs. MI \$2.00 Ph \$14.00.
- OSRD 2078 PBL 8007 (I-561)  
Knapp, Robert T.  
Water tunnel tests of the 15 cm. German spinner rocket. 1943.  
6p illus. MI \$.50 Ph \$1.00.
- OSRD 2079 PBL 10503 (I-1346)  
Dorn, J. E., and others  
Formability of magnesium alloy sheet: Part II, Forming of bonds on the Querin press (NA-148). Final report. Nov 1943.  
112p curves, photos, tables. MI \$1.50 Ph \$8.00.
- OSRD 2080 See OSRD 3398.
- OSRD 2081 PBL 63630 (5-290)  
Smith, Nicholas, M., Jr.  
A vertical step-sweep circuit for the cathode ray oscilloscope. Nov 1943.  
11p diagrs, graphs. MI \$1.00 Ph \$1.00.
- OSRD 2082 PBL 63628 (5-210)  
Moisher, Don R.  
Preparation of chromium by the thermal decomposition of chromium iodide. Nov. 1943.  
11p photo, drawings, table. MI \$1.00 Ph \$1.00.
- OSRD 2084 PBL 27540 (2-107)  
Bell Telephone Laboratories, New York  
Magnetic airborne detector, investigation of magnetic noise. Oct 1943.  
47p graphs, diagrs, drawings. MI \$1.00 Ph \$4.00.
- OSRD 2085 PBL 27162 (2-300)  
Rosser, J. Barkley  
Relations between a rocket and its equivalent shell. Nov 1943.  
12p MI \$1.00 Ph \$1.00.
- OSRD 2087 PBL 27296 (2-611)  
Adams, J. K., and others  
The relationship of visual acuity to acuity of stereoscopic vision. Sep 1943.  
23p tables. MI \$1.00 Ph \$2.00.
- OSRD 2089 PBL 22481 (2-83)  
National Research Corporation, Boston, Mass.  
Report of lithium research, Mar 15, 1943-Oct 18, 1943. Dec 1943.  
10p diagrs. MI \$.50 Ph \$2.00.
- OSRD 2091 PBL 2582 (I-188)  
Blake, Charles H., and Russell, Henry D.  
Final report on insects and other animals of interest to the Quartermaster Corps. 1943.  
356p MI \$4.00 Ph \$24.00.
- OSRD 2094 PBL 12145 (I-806)  
Bakelite Corp., Bloomfield, N. J.  
Protective coatings for magnesium alloys. Progress report. Dec 1943.  
20p MI \$.50 Ph \$2.00.
- OSRD 2096 PBL 10363 (I-1271)  
Lindsey, Donald B., and others  
Use of the Philco trainer in the training of A-Scan oscilloscope operators. Oct 1943.  
27p diagrs, graphs. MI \$.50 Ph \$2.00.
- OSRD 2430 PBL 34776 (2-987)  
Rule, B. H.  
Optical method of measuring angular changes of projectile model during entry phase. Mar 1945.  
11p diagrs, photos. MI \$1.00 Ph \$1.00.
- OSRD 3002 PBL 10421 (I-1013)  
Grinstead, C. E.  
The development and tests of an inductor compass. Nov 1943.  
58p photos, diagrs, maps. MI \$1.00 Ph \$14.00.
- OSRD 3003 PBL 6008 (I-565)  
Knapp, Robert T.  
Memorandum on water tunnel tests of the H-6, 2.36" A.T. rocket with five designs of shroud ring tail. 1943.  
25p illus. MI \$.50 Ph \$2.00.
- OSRD 3004 PBL 13317 (I-824)  
Beteron, D. A.  
Factor analysis of the new United States Navy Basic Classification Test Battery. Sep 1943.  
13p MI \$.50 Ph \$1.00.
- OSRD 3005 PBL 15849 (I-1188)  
Troiano, Alexander R.  
An investigation of the metallographic and physical properties of new types of gun steels (OD-34-3). Progress report, Nov 15, 1943. Dec 1943.  
36p photos, graphs. MI \$.50 Ph \$3.00.
- OSRD 3006 PBL 15477 (I-1249)  
Poirie, W. H., and Anderson, E. A.  
Prevention of stress-corrosion cracking of cartridge brass by protective coatings or surface treatment (OD-29): Progress report, Aug 15-Nov 15, 1943. Dec 1943.  
11p MI \$.50 Ph \$1.00.
- OSRD 3007 PBL 15742 (I-1022)  
Anderson, H. V., and others  
Residual stresses in cold-drawn, non-ferrous alloys; An x-ray study. Progress report: Jul 1-Nov 1, 1943. Dec 1943.  
32p graphs. MI \$.50 Ph \$3.00.
- OSRD 3011 PBL 32202 (2-743)  
Comings, E. W., and others  
New chlorine carriers for metal chloride screening smoke mixtures. Progress report, Jul 1, 1943. Dec 1943.  
61p photos, tables. MI \$2.00 Ph \$5.00.
- OSRD 3015 PBL 22603 (I-1480)  
Craighead, C. H., and Gillett, H. W.  
Examination of enemy material (OD-119): Metallurgical examination of German and Japanese aluminum ware. Progress report 24, Nov 15, 1943. Dec 1943.  
26p tables, photos. MI \$.50 Ph \$2.00.
- OSRD 3016 PBL 10546 (I-1496)  
Barrett, Charles S., and others  
Deformation characteristics of magnesium alloys (NA-148): Metallography of commercial magnesium sheet. Progress report, Dec 1, 1943.  
11p MI \$.50 Ph \$1.00.
- OSRD 3017 PBL 22604 (2-43)  
Brenell, L. H., and others  
Examination of enemy material (OD-119): Metallurgical examination of a German MG-34 machine gun of 1941. Progress report 25, Nov 12, 1943. Dec 1943.  
23p photos, tables, drawings. MI \$.50 Ph \$2.00.
- OSRD 3018 PBL 32222 (2-801)  
Soros, Harold, and Shapiro, Hyman  
Development of a chemical process for deleading gasoline. Final report. Dec 1943.  
48p diagrs, graphs, tables. MI \$.50 Ph \$4.00.

## Bibliography

29

- OSRD 3023 PBL 11207 (I-701)  
 Teare, B. R., Jr.  
 Model study of the Rotaflail. First report. Dec 1943.  
 25p illus. Mi \$.50 Ph \$2.00.
- OSRD 3025 PBL 28541 (2-358)  
 Mitchell, George A., and others  
 Modification of the Metronon shutter to increase its speed. Final report. Nov 1943.  
 24p diagrs, photos, tables. Mi \$1.00 Ph \$2.00.
- OSRD 3028 PBL 18884 (I-1580)  
 Wood, D. S., and others  
 The influence of specimen dimension and shape on the results of tensile impact tests. Dec 1943.  
 32p drawings, graphs, tables. Mi \$.50 Ph \$3.00.
- OSRD 3031 PBL 20294 (2-258)  
 Handelman, G. H., and others  
 Forced vibrations of a simple oscillator with limited displacement. Dec 1943.  
 18p drawings. Mi \$.50 Ph \$2.00.
- OSRD 3032 PBL 20179 (I-1412)  
 Stitt, J. R.  
 Stress relief of weldments for machining stability (OD-34-2); Part I. Dec 1943.  
 63p Mi \$1.00 Ph \$5.00.
- OSRD 3033 PBL 19517 (I-1579)  
 Jackson, L. R., and others  
 Fatigue properties of magnesium alloys and structures; Fatigue properties of magnesium alloy sheet—Part I (NA-145). Final report, Aug 31, 1943. Dec 1943.  
 145p photos, curves, tables. Mi \$1.50 Ph \$10.00.
- OSRD 3034 PBL 15842 (I-1407)  
 Field, A. L., and others  
 Development of armor welding electrodes (OD-36-72); the effect of variations in chromium-nickel ratio and molybdenum content of Austenitic (20 CR-10 Ni) electrodes on properties of armor weldments. Progress report, Nov 15, 1943. Dec 1943.  
 42p diagrs, photos, tables. Mi \$.50 Ph \$3.00.
- OSRD 3036 PBL 50855 (4-294)  
 Weatherby, B. B.  
 Effects of subsurface detonations in earth, II. Dec 1943.  
 44p drawings, graphs, tables. Mi \$1.00 Ph \$3.00.
- OSRD 3038 PBL 23712 (2-466)  
 Brillouin, Leon  
 On light scattering by spheres. Dec 1943.  
 18p Mi \$.50 Ph \$2.00.
- OSRD 3039 PBL 13302 (I-900)  
 Conrad, Herbert S.  
 Item analysis of Navy aptitude tests. Dec 1943.  
 117p Mi \$.50 Ph \$8.00.
- OSRD 3040 PBL 12181 (I-904)  
 Mote, F. A., and others  
 Results obtained from testing recruits with the New London-NORC Questionnaire at the Newport Naval Training Station. Dec 1943.  
 8p Mi \$.50 Ph \$1.00.
- OSRD 3042 PBL 16765 (I-1409)  
 Miller, R. F., and Cross H. C.  
 Advisory report on Survey of data on alloys developed for turbosupercharger and gas turbine applications. Dec 1943.  
 31p tables, diagrs. Mi \$.50 Ph \$3.00.
- OSRD 3043 PBL 40534 (3-414)  
 Dorn, John E., and others  
 Properties and heat treatment of magnesium alloys (NA-144). Part V. Section I. The sensitivity of magnesium alloy sheet to drilled, reamed, and punched holes; Section II. The notch sensitivity of magnesium alloy extrusions and the influence of various factors. Final report, Nov 10, 1943. Dec 1943.  
 209p tables, graphs, photomicrographs. Mi \$5.00 Ph \$14.00.  
 See also PB 40530-40533.
- OSRD 3047 PBL 31955 (2-867)  
 Kassel, Louis S., and others  
 Purification of Levensstein mustard by distillation with pentane vapor. Final report, Nov 1943. Dec 1943.  
 28p diagrs, tables, graphs, flow sheet. Mi \$1.00 Ph \$2.00.
- OSRD 3048 PBL 15609 (I-1143)  
 Latimer, W. M., and others  
 The hot wire analyzer for gas concentrations. Progress report to November 20, 1943. Dec 1943.  
 21p Mi \$.50 Ph \$2.00.
- OSRD 3053 PBL 22465 (2-82)  
 Hyland, H. G., and Hunter, C. M.  
 Design of plant for producing sodium hydride-aluminum mixture. Progress report. Dec 1943.  
 20p diagrs. Mi \$.50 Ph \$2.00.
- OSRD 3055 PBL 15850 (I-1361)  
 Wells, Cyril, and Mohl, R. F.  
 Improvement in wrought gun tubes (OD-34-3). Quarterly report, Oct 15, 1943. Dec 1943.  
 8p Mi \$.50 Ph \$1.00.
- OSRD 3056 PBL 16758 (I-1114)  
 Weinman, E. W., and Boegehold, A. L.  
 Heat treatment of national emergency steels for use in tanks, combat cars, gun mounts, and other ordnance materiel. Progress report. Jul 1-Sep 30, 1943. Dec 1943.  
 28p graphs. Mi \$.50 Ph \$2.00.
- OSRD 3060 See OSRD 1673.
- OSRD 3061 PBL 19568 (I-1408)  
 Sachs, George, and others  
 Correlation of information available on the fabrication of aluminum alloys (NA-126). Section II—Examples of fabricating individual parts. Final report. Vol. I, Jun 15, 1943; Vol. II, Sept 15, 1943. Jul, Dec 1943.
- | PB    | OSRD | P   | Mi     | Ph      |
|-------|------|-----|--------|---------|
| 19568 | 3061 | 212 | \$2.50 | \$15.00 |
| 19569 | 1674 | 159 | 2.00   | 11.00   |
- OSRD 3063 PBL 19567 (I-1503)  
 Sachs, George  
 Correlation of information available on the fabrication of aluminum alloys (NA-126): Final report section III, summary, contents, and index of sections I and II. Dec 1943.  
 46p Mi \$.50 Ph \$4.00.
- OSRD 3064 PBL 6815 (I-484)  
 Hurd, Charles D.
- Progress report on "Selenonium and sulfonium halides," to December 8, 1943. 1944.  
 13p Mi \$.50 Ph \$1.00.
- OSRD 3065 PBA 6814 (I-682)  
 Hurd, Charles, D.  
 "Synthesis of various amino acids." Jan 1944.  
 13p Mi \$.50 Ph \$1.00.
- OSRD 3066 PBL 5227 (I-349)  
 Bakelite Corporation  
 Progress report on "Methods of studying corrosion and blistering tendencies of underwater coatings." 1944.  
 20p Ph \$2.00 Mi \$.50.
- OSRD 3067 PBL 5214 (I-438)  
 Knapp, Robert T.  
 Memorandum on water tunnel tests of the 4.5" rocket projectile with three different fin tails and with one ring type tail. 1943.  
 40p illus. Ph \$3.00 Mi \$.50.
- OSRD 3068 PBL 5210 (I-437)  
 Knapp, Robert T.  
 Memorandum on water tunnel tests of a 2.37" rocket projectile with hemispherical noses and ring tails. 1943.  
 21p illus. Ph \$2.00 Mi \$.50.
- OSRD 3069 PBL 20282 (2-6)  
 Lollar, Robert M.  
 Preservation of shoe sewing thread. Progress report. Jan 1944.  
 17p Mi \$.50 Ph \$2.00.
- OSRD 3070 PBL 34798 (3-102)  
 Ports, Delmer C.  
 Effect of hills and trees as obstructions to radio propagation: Analysis of propagation characteristics of high and very high frequencies over hills and through trees for fixed point communication at elevations above the ground level. Final report. Nov 1943.  
 166 p charts, curves, drawings, map, photos. Mi \$4.00 Ph \$12.00.
- OSRD 3071 PBA 15628 (I-986)  
 Pease, Robert M., and others  
 Catalysts for the oxidation of carbon monoxide in air; Progress report to July 1, 1943. Jan 1944.  
 20p tabs. Mi \$.50 Ph \$2.00.
- OSRD 3074 PBL 5207 (I-373)  
 Knapp, Robert T.  
 Water tunnel tests of the M-7, 2.36" A.T. rocket. 1943.  
 25p illus. Ph \$2.00 Mi \$.50.
- OSRD 3075 PBL 5844 (I-411)  
 Almy, G. M., and others  
 Three to twenty million volt radiography. 1944.  
 38p Ph \$3.00 Mi \$.50.
- OSRD 3078 PBA 6801 (2-866)  
 Jenkins, Russell L., and Hardy, Edgar E.  
 Preparation of alkyl fluorophosphates. 1944.  
 30p illus. Ph \$2.00 Mi \$.50.
- OSRD 3084 PBL 31053 (2-873)  
 Jones, Reginald L.  
 A wide range projector for the lower audible and upper subsonic frequencies. Nov 1943.  
 58p photos, tables, graphs, diagrs. Mi \$2.00 Ph \$4.00.

- OSRD 3086 PBL 58225 (4-968)  
Gulf Research and Development Co., Pittsburgh,  
Pa.  
Experimental investigations in connection  
with high angle dirigible bombs: The AZON bomb.  
Progress report, Oct 15, 1943. Jan 1944.  
15p photos, diagrs, graphs.  
Mi \$4.00 Ph \$11.00.
- OSRD 3088 PBL 4025 (1-446)  
Vitales, Morris S., and others  
Memorandum on supplemental lesson  
plans for course in 40 mm. gunnery. 1944.  
9p Ph \$1.00 Mi \$.50.
- OSRD 3089 PBL 50868 (4-575)  
Ellis, L. G., and others  
Location of non-metallic land mines by the  
use of high frequency oscillations. Feb 1944.  
33p diagrs, graphs, photos.  
Mi \$1.00 Ph \$3.00.
- OSRD 3090 PBL 24882 (2-257)  
Ellis, L. G., and others  
The location of non-metallic land mines  
by the use of vibrational devices. Feb 1944.  
70p photos, diagrs, drawings, tables, graphs.  
Mi \$1.00 Ph \$5.00.
- OSRD 3099 PBL 6558 (1-465)  
Jones, C. B., and Davies, D. R.  
Sound recording on magnetic materials. 1943.  
15p Ph \$1.00 Mi \$.50.
- OSRD 3101 PBL 21124 (1-1437)  
McAdams, W. H., and others  
Means of improving inflation of life rafts  
at low temperatures: Progress report. Jan 1944.  
10p tables. Mi \$.50 Ph \$2.00.
- OSRD 3102 PBL 18365 (2-16)  
Lindley, Donald B., and others  
A study of the Foxboro trainer as a  
training device for learning to track by  
means of pip-matching. Dec 1943.  
16p curves, tables. Mi \$.50 Ph \$2.00.
- OSRD 3103 PBL 18361 (1-1270)  
Lindley, Donald B., and others  
Memorandum on recommendations for the  
use of the Foxboro Trainer (BC-968). Dec 1943.  
12p graphs. Mi \$.50 Ph \$1.00.
- OSRD 3105 PBL 22889 (2-170)  
Wiener, F. M., and others  
Response characteristics of inter-  
phone equipment IV. Jan 1944.  
80p graphs. Mi \$3.50 Ph \$22.00.
- OSRD 3106 PBL 19820 (2-78)  
Rudmose, H. W., and others  
Effects of high altitude on the  
human voice. Jan 1944.  
114p diagrs, graphs, tables.  
Mi \$1.50 Ph \$8.00.
- OSRD 3108 See OSRD 4052.
- OSRD 3109 PBL 22805 (2-42)  
Grenell, L. H., and others  
Examination of enemy material (00-113):  
Metallurgical and industrial examination of  
two Japanese 20 mm. aircraft mounted mach-  
ine guns of 1941. Progress report 28, Dec  
6, 1943. Jan 1944.  
57p photos. Mi \$1.00 Ph \$4.00.
- OSRD 3111 PBL 6549 (1-471)  
Yee, John H., and Cogbill, Everett C.
- Organic reagents for L and ED. 1944.  
9p Ph \$1.00 Mi \$.50.
- OSRD 3113 \* PBA 6802 (1-830)  
Jenkins, R. L., and others  
Description of process preliminary,  
diisopropyl fluorophosphate, Batch Method.  
Progress report to Jan 1, 1944. Jan 1944.  
20p diagram. Mi \$.50 Ph \$2.00.
- OSRD 3115 PBL 22806 (2-128)  
Gillett, H. W., and others  
Examination of enemy material (00-113):  
Metallurgical examination of German 80 mm.  
mortar shells. Jan 1944.  
24p photos, drawings. Mi \$.50 Ph \$2.00.
- OSRD 3116 PBL 22807 (2-46)  
Henderson, A. S., and others  
Examination of enemy material (00-113):  
Metallurgical examination of a 6.5 mm.  
Japanese light machine gun. Progress re-  
port 30, Dec 8, 1943. Jan 1944.  
18p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 3117 PBL 20278 (2-32)  
Roddy, William T., and Gapuz, Domingo B.  
Influence of oils on shoe leathers:  
Behavior of oil treated leather at cold and  
at hot temperatures. Progress report. Jan 1944.  
50p Mi \$.50 Ph \$4.00.
- OSRD 3118 PBL 20279 (2-32)  
Greene, H. S.  
Sterilization of used army shoes.  
Progress report. Jan 1944.  
27p Mi \$.50 Ph \$2.00.
- OSRD 3119 ~ PBL 20280 (2-32)  
Lollar, Robert M.  
Hold resistant treatments for leathers.  
Progress report. Jan 1944.  
25p tables. Mi \$.50 Ph \$2.00.
- OSRD 3120 PBL 20281 (2-32)  
Greene, Hoke S., and Lollar, Robert M.  
Preservatives in Army dubbings.  
Progress report. Jan 1944.  
20p tables. Mi \$.50 Ph \$2.00.
- OSRD 3121 PBL 23724 (2-31a)  
Moulton, E. J., and Lewis, John H.  
A system for obtaining great circle fixes  
by use of stereographic grids or maps. Dec 1943.  
29p diagrs, photos. Mi \$.50 Ph \$2.00.
- OSRD 3125 PBL 22608 (2-129)  
Gillett, H. W., and others  
Examination of enemy material (00-113):  
Metallurgical examination of German 50 mm.  
mortar shells manufactured in 1939 and  
1940. Jan 1944.  
19p photos, drawings. Mi \$.50 Ph \$2.00.
- OSRD 3126 PBL 22809 (2-45)  
Henderson, A. S., and others  
Examination of enemy material (00-113):  
Metallurgical examination of an Italian  
20 mm. antitank Solothurn rifle. Pro-  
gress report 31, Dec 14, 1943. Jan 1944.  
19p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 3127 PBL 22610 (1-1574)  
Gillett, H. W., and others  
Examination of enemy material (00-113):  
A metallurgical examination of three Japanese  
75 mm. high-explosive shells and carrier. Prog-  
ress report 27, Dec 1, 1943. Jan 1944.  
40p photos, tables. Mi \$.50 Ph \$3.00.
- OSRD 3128 PBL 51004 (4-871)  
Rochester University, Institute of Optics  
Air-surface vessel identification system—  
IV. (Developments to Oct 15, 1943.) Oct 1943.  
36p photos, diagrs. Mi \$1.00 Ph \$3.00.
- OSRD 3134 PBA 33250 (3-6)  
Rochester University, Institute of Optics  
Report on development of infrared-  
sensitive phosphors. Aug 1943.  
9ip tables, graphs, diagrs.  
Mi \$2.00 Ph \$7.00.
- OSRD 3135 PBL 28600 (2-536)  
Morey, D. R.  
The flash protective shutter for air-  
craft binoculars. Final report. Sep 1943.  
25p photos, drawings. Mi \$1.00 Ph \$2.00.
- OSRD 3136 PBL 33357 (2-822)  
Bausch and Lomb Optical Co., Rochester, N. Y.  
Schmidt auto-collimator unit. Report No. 2:  
Part I. Molds; Part II. Auto-collimator units  
and final report. Dec 1943. Jun 1945.  
8p Mi \$1.00 Ph \$1.00.  
See also PB 33356.  
PB 33357 OSRD 3136 8p Mi \$1.00 Ph \$1.00  
PB 33358 OSRD 5158 11p Mi \$1.00 Ph \$1.00
- OSRD 3137 PBL 51002 (4-1067)  
Floyd, F. M.  
Stereoscopic camera with rapid auto-  
matic development. May 1943.  
8p photos, drawings. Mi \$1.00 Ph \$1.00.  
For later report see PB 51003.
- OSRD 3138 PBL 23251 (2-651)  
Carnegie Institution of Washington, Mount  
Wilson Observatory  
Methods of making triple prisms. First  
and second progress report, Aug 1, 1942-  
Mar 31, 1943. Jan-Mar 1943.  
Graph.  

PB	P	OSRD	Mi	Ph
33251	8	3139	\$1.00	\$1.00
33252	4	3138	1.00	1.00
- OSRD 3139 See OSRD 3138.
- OSRD 3140 PBL 33340 (2-864)  
Polytechnic Institute of Brooklyn  
OSRD contract No. OEMar 982 (prepara-  
tion of infra-red phosphors). Report, Mar-  
Aug 31, 1943. Aug 1943.  
52p tables, drawings, curves.  
Mi \$2.00 Ph \$4.00.
- OSRD 3141 PBL 22466 (2-82)  
Bond, H. A., and McGovern J. J.  
Generator for the use of sodium hyd-  
ride-aluminum mixture for field generation  
of hydrogen: Final report. Jan 1944.  
35p photos, diagrs, table. Mi \$.50 Ph \$3.00.
- OSRD 3142 PBL 22467 (2-82)  
Bond, H. A., and Dunning, J. W.  
Sodium hydride-aluminum mixtures for field  
generation of hydrogen: Final report. Jan 1944.  
29p photos, diagrs, tables. Mi \$.50 Ph \$2.00.
- OSRD 3143 PBL 19554 (1-1347)  
Gensamer, Maxwell, and others  
Plastic flow of aluminum aircraft sheet  
under combined loads-1 (Ma-149): Progress  
reports, May 1943-Mar 1944. n.d.  
Curves, tables, photos.  

PB	OSRD	Mi	Ph
19554	3143	.50	\$3.00
19560	1546	.50	\$2.00
19561	1940	.50	\$3.00
19563	3744	.50	\$3.00

- OSRD 3148 PBL 27541 (2-108)  
Bell Telephone Laboratories, New York  
Magnetic airborne detector investigation of magnetic noise (supplemental report). Jan 1944.  
20p graphs, diagrs. MI \$1.00 Ph \$2.00.
- OSRD 3152 PBL 15848 (I-1347)  
Fetters, K. L., and others  
Improvement in gun steel ingot practice (OD-34-2). Progress report, Jul 15-Oct 15 1943. Jan 1944.  
60p diagrs, drawings, photos. MI \$.50 Ph \$4.00.
- OSRD 3153 PBL 20286 (2-54)  
Clark, R. E., and others  
The effects of sleep loss on performance of a complex task. Sep 1943.  
19p diagrs, graphs, figures. MI \$.50 Ph \$2.00.
- OSRD 3154 PBA 18868 (2-323)  
Westheimer, F. H.  
The oxynitration reaction: Progress report, Jan 13, 1944. Jan 1944.  
45p tables, graph. MI \$.50 Ph \$3.00.
- OSRD 3157 PBL 12024 (I-766)  
Kurtz, Albert K., and Seashore, Harold  
The code receiving tests. Feb 1944.  
3p MI \$.50 Ph \$1.00.  
(Complete set of phonograph records at Library of Congress.)
- OSRD 3159 PBL 31010 (3-88)  
Primakoff, H.  
The acoustic properties of domes, part I. Jan 1944.  
43p drawings, graphs, tables. MI \$1.00 Ph \$3.00.  
For part II see PB 31011.
- OSRD 3161 PBL 5212 (I-437)  
Knapp, Robert T.  
Memorandum on water tunnel tests of a 4.5" rocket projectile. 1943.  
18p illus. Ph \$2.00 MI \$.50.
- OSRD 3163 PBA 8892 (I-1063)  
Reed, Frank H., and Finger, G. C.  
"Aromatic fluorocarbons" to January 30, 1943. Final report. Jan 1944.  
34p MI \$.50 Ph \$3.00.
- OSRD 3164 PBL 22468 (I-1601)  
Maurer, Frank W.  
Development of a full-face oxygen mask incorporating ventilated fog-proof lenses. Progress report, Jan 20, 1944. Jan 1944.  
57p drawings, photos. MI \$1.00 Ph \$4.00.
- OSRD 3165 PBL 22611 (I-1582)  
Henderson, A. S., and others  
Examination of enemy materiel (OD-113): Corrosion protection of Japanese ordnance. Progress report 32, Dec 27, 1943. Jan 1944.  
13p photos. MI \$.50 Ph \$1.00.
- OSRD 3166 PBL 30782 (2-538)  
Bryant, E. E., and McIntyre, G. H.  
Development of a suitable and noncritical fused inorganic coating for cooking utensils and other quartermaster's items (QMC-18). Final report, Dec 15, 1943. Jan 1944.  
35p drawings. MI \$1.00 Ph \$3.00.
- OSRD 3168 PBL 5208 (I-373)  
Knapp, Robert T.
- Water tunnel tests of the 7.2" chemical rockets. 1943.  
26p illus. Ph \$2.00 MI \$.50.
- OSRD 3172 PBL 43039 (3-865)  
Kell, R. D.  
Improved sensitivity of television equipment. Progress report No. 3, Oct 1-Dec 1, 1943. Dec 1943.  
20p diagrs, photos. MI \$1.00 Ph \$2.00.  
See also PB 43037 and PB 43038.
- OSRD 3173 PBL 43034 (3-866)  
Rose, A.  
Improved sensitivity of television equipment. Progress report, Oct-Nov 1943. Nov 1943.  
5p MI \$1.00 Ph \$1.00.  
For final report see PB 43036.
- OSRD 3174 PBL 43037 (3-865)  
Kell, R. D.  
Improved sensitivity of television equipment. Progress report No. 1, Jan-Aug 1943. Aug 1943.  
40p diagrs, photos. MI \$1.00 Ph \$3.00.  
See also PB 43038, PB 43039.
- OSRD 3175 PBL 19543 (I-1501)  
Hunter, M. A.  
Physical and stress corrosion properties of magnesium alloys sheet (MA-147): Progress report, Sep 1, to Dec 1, 1943. Jan 1944.  
21p MI \$.50 Ph \$2.00.
- OSRD 3176 PBL 33209 (2-969)  
DeGarmo, E. Paul, and others  
Residual stresses in ship welding. Progress report, Jul 1-Nov 1, 1943. Jan 1944.  
80p photos, drawings, tables. MI \$2.00 Ph \$6.00.  
See also PB 33210, PB 33211, and 61376.
- OSRD 3177 PBL 13318 (I-824)  
Gulliksen, Harold  
Memorandum on service school grades. Jan 1944.  
11p MI \$.50 Ph \$1.00.
- OSRD 3178 PBL 12028 (I-1043)  
Snidecor, John C., and others  
Methods of training telephone talkers for increased intelligibility. Jan 1944.  
44p MI \$.50 Ph \$3.00.
- OSRD 3179 PBA 6803 (I-701)  
Woodhouse, John C., and others  
Storage characteristics and stabilization of Levinstein H. n.d.  
74p MI \$1.00 Ph \$5.00.
- OSRD 3180 PBL 21111 (I-1498)  
Clark, D. S., and others  
The influence of velocity on the tensile properties of a carbon steel, two national emergency steels, and a manganese steel. Jan 1944.  
52p tables, graphs, photos. MI \$1.00 Ph \$4.00.
- OSRD 3181 PBL 22612 (I-1575)  
Hoglund, and others  
Examination of enemy material (OD-113): Examination of a joint on a Japanese gasoline tank. Progress report 36, Jan 7, 1944. Jan 1944.  
5p photo. MI \$.50 Ph \$1.00.
- OSRD 3182 PBL 22613 (I-1574)  
Grenell, L. H., and others  
Examination of enemy material (OD-113): A metallurgical examination of a
- Japanese four-barrel carburetor. Progress report 34, Dec 30, 1943. Jan 1943.  
13p photos. MI \$.50 Ph \$1.00.
- OSRD 3183 PBL 22614 (I-1580)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of a German Pz.B. antitank rifle of 1941. Progress report 33, Dec 23, 1943. Jan 1943.  
23p photos, tables. MI \$.50 Ph \$2.00.
- OSRD 3186 PBL 13301 (I-824)  
Frederiksen, Norman, and Peterson, D. A.  
Development and validity of the United States Navy officer qualification test. Jan 1944.  
10p MI \$.50 Ph \$7.00.
- OSRD 3187 PBL 13319 (I-801)  
Gulliksen, Harold  
Selection of test items by correlation with an external criterion, as applied to the mechanical comprehension test-QQT O-Z. Jan 1944.  
11p MI \$.50 Ph \$1.00.
- OSRD 3193 PBL 5209 (I-373)  
Knapp, Robert T.  
Water tunnel tests of 2.37" rocket projectile with collapsible type tails. 1943.  
20p illus. Ph \$2.00 MI \$.50.
- OSRD 3195 PBL 5211 (I-438)  
Knapp, Robert T.  
Memorandum on water tunnel tests of the H-6, 2-36" A.T. rocket, showing comparison of performances with the conical pointed nose combined with three types of shroud ring tail and with shroud rings of various lengths. 1943.  
19p illus. Ph \$2.00 MI \$.50.
- OSRD 3196 PBL 4642 (I-442)  
Thompson, Norman J., and others  
The use of fortified fuel in flame throwers, incendiary bombs and incendiary mortars. 1944.  
43p illus. Ph \$3.00 MI \$.50.
- OSRD 3197 PBL 21122 (2-230)  
Wheeler, T. L., and Latham, Allen, Jr.  
Hand-operated vapor compression still for producing potable water from sea water: Final report. Jan 1944.  
25p photos, diagrs. MI \$.50 Ph \$2.00.
- OSRD 3207 PBL 18885 (I-1577)  
Dowez, Pol E.  
Preliminary experiments on propagation of plastic deformation, a revision on NDRC Report A-33 (OSRD No. 380). Feb 1944.  
23p curves. MI \$.50 Ph \$2.00.
- OSRD 3208 PBL 33387 (3-24)  
New Jersey Zinc Co., Research Div., and General Electric Co., Melville Park Engineering Dept.  
Blackout driving-ultraviolet system—as demonstrated at Palmerston, Pa., on Sep 27, 1943. Report, Jul 1-Oct 1, 1943. Nov 1943.  
37p photos, graphs, map, table. MI \$1.00 Ph \$3.00.  
Samples will not reproduce. See also PB 33348.
- OSRD 3209 PBL 15234 (I-1166)  
Herzfeld, Karl F.  
A theorem on radial deformation in thick tubes. Jan 1944.  
10p MI \$.50 Ph \$1.00.

**Bibliography**

- OSRD 3210 See OSRD 4404.
- OSRD 3213 PBL 5579 (I-502)  
Lundy, W. L., and Comings, E. W.  
A continuous sulphur smoke generator. 1944.  
15p illus. Ph \$3.00 Mi \$.50.
- OSRD 3215 PBL 31009 (2-962)  
Gregg, E. C., Jr.  
Thermocouple wattmeters using unmatched thermocouples. Jan 1944.  
7p diagr. Mi \$.100 Ph \$1.00.
- OSRD 3216 PBL 11209 (I-686)  
Holm, H. J., and Webb, R. C.  
Design and construction of cathode ray oscillograph. Mar 1944.  
55p illus. Mi \$.100 Ph \$4.00.
- OSRD 3218 PBL 19505 (I-1346)  
Dorn, J. E., and Thomsen, E. G.  
The effect of combined stresses on the ductility of metals. Feb 1944.  
42p diagrs, charts. Mi \$.50 Ph \$3.00.
- OSRD 3219 PBL 16487 (I-1043)  
Badger, Richard H., and others  
Report on an investigation of photographic methods of making reticles. Dec 1943.  
5ip photos. Mi \$.100 Ph \$4.00.
- OSRD 3227 PBL 32206 (2-865)  
Schumb, Walter C., and others  
The generation of fluorine. Progress report. Jun 1943. Final report Jan 1944, Feb 1944.  
PB 32205 OSRD 1690 15p Mi \$.100 Ph \$1.00  
PB 32206 OSRD 3227 8p Mi 1.00 Ph 1.00
- OSRD 3228 PBL 6542 (I-539)  
Jenkins, R. L., and others  
Description of process, preliminary, diisopropyl fluorophosphate, continuous method. 1944.  
29p Mi \$.50 Ph \$2.00.
- OSRD 3230 PBL 27144 (2-537)  
Koehler, James S., and Seitz, Frederick  
The stress waves produced in a plate by a plane pressure pulse. Feb 1944.  
40p diagrs. Mi \$.100 Ph \$3.00.
- OSRD 3232 PBL 22867 (2-51)  
Rosser, J. Barkley  
Fin opening. Feb 1944.  
28p graph, drawings, tables. Mi \$.50 Ph \$2.00.
- OSRD 3236 PBL 22615 (2-44)  
Grenell, L. H., and others  
Examination of enemy material (OD-113): Metallurgical examination of welded armor plate—German Pzkw III tank. Progress report 35, Dec 31, 1943. Feb 1944.  
16p photos, diagrs. Mi \$.50 Ph \$2.00.
- OSRD 3237 PBL 27143 (2-300)  
Pugh, Emerson H.  
Explosion chamber muffler. Feb 1944.  
10p diagrs. Mi \$.100 Ph \$1.00.
- OSRD 3238 See OSRD 3298.
- OSRD 3239 PBL 4194 (I-318)  
Johnson, R. E., Carnegie Institute, Geophysical Laboratory  
A method of obtaining the state and composition of the powder gas at shot ejection with tables for pyro powder.  
15p Mi \$.50 Ph \$1.00.
- OSRD 3245 PBL 13300 (I-980)  
Frederiksen, Norman  
Validity of Navy aptitude tests in service schools at the Great Lakes Naval Training Station. Jan 1944.  
36p tables. Mi \$.50 Ph \$3.00.
- OSRD 3246 PBL 13320 (I-900)  
Conrad, Herbert S.  
Statistical analysis of the Mechanical Knowledge test. Jan 1944.  
14p Mi \$.50 Ph \$1.00.
- OSRD 3249 PBA 6522 (I-681)  
Folkers, Karl  
Preparation and testing of substances as neutralizing or therapeutic agents for H burns. Feb 1944.  
43p Mi \$.50 Ph \$3.00.
- OSRD 3256 PBL 18470 (I-1247)  
Clark, D. S., and others  
The influence of impact velocity on the tensile properties of four magnesium alloys and 24S Aluminum alloy. Feb 1944.  
30p Mi \$.50 Ph \$2.00.
- OSRD 3257 PBL 22622 (2-44)  
Grenell, L. H., and others  
Examination of enemy material (OD-113): A metallurgical study of a 28/20 mm. German gun barrel. Progress report 37, Jan 8, 1944. Feb 1944.  
13p photos, diagrs. Mi \$.50 Ph \$1.00.
- OSRD 3258 PBL 27342 (2-504)  
Gildart, L. W.  
An investigation of the comparative merits of the thermistor-a.c. amplifier system and the thermocouple-galvanometer system. Final report. Jan 1944.  
32p graphs. Mi \$.100 Ph \$3.00.
- OSRD 3259 PBL 34124 (3-49)  
U. S. National Defense Research Committee  
Tank fire control—visual range estimation: Range finders and range finder fields. Report to the services No. 77. Div. 7, Fire Control, Feb 1944.  
87p tables, graphs. Mi \$2.00 Ph \$6.00.
- OSRD 3260 PBL 20283 (2-32)  
Lollar, Robert M.  
Report on toxicity studies on preservative bearing leather. n.d.  
14p tables. Mi \$.50 Ph \$1.00.
- OSRD 3262 PBL 12182 (I-901)  
Graham, C. H., and others  
The relation of selection test scores to tank escape performance: Submarine school. Jan 1944.  
11p Mi \$.50 Ph \$1.00.
- OSRD 3263 PBL 22616 (2-42)  
Grenell, L. H., and others  
Examination of enemy material (OD-113): Metallurgical examination of a German 7.92 mm. semiautomatic rifle, Gewehr 41 (W). Progress report 38, Jan 21, 1944. Feb 1944.  
13p photos. Mi \$.50 Ph \$1.00.
- OSRD 3267 PBL 22617 (2-43)  
Grenell, L. H., and others  
Examination of enemy material (OD-113): Metallurgical examination of a German Schmeisser submachine gun 9 mm., model MP-40.
- OSRD 3268 PBL 22618 (2-45)  
Reichelderfer, Charles A., and others  
Examination of enemy material (OD-113): Metallurgical examination of tungsten carbide cores from German armor-piercing projectiles. Progress report 40, Jan 13, 1944. Feb 1944.  
11p photos. Mi \$.50 Ph \$1.00.
- OSRD 3269 PBM 6520 (I-696)  
Kidd, John G., and Landsteiner, Karl  
Induced hypersensitivity to bis (B-Chloroethyl) sulphide and to (BAL) in guinea pigs. Jan 1944.  
20p Mi \$.50 Ph \$2.00.
- OSRD 3272 PBL 19540 (I-1487)  
Barrett, Charles S., and others  
Deformation characteristics of magnesium alloys (NA-148): Second quarterly progress report, Sep 15 to Dec 15, 1943. Feb 1944.  
47p Mi \$.50 Ph \$4.00.
- OSRD 3274 PBL 19515 (I-1502)  
Mattson, R. L., and Almen, J. O.  
Effect of shot blasting on the mechanical properties of steel (NA-115): Part I. Final report, Oct 1, 1942-Sep 30, 1943. Feb 1944.  
113p charts, diagrs, photos, tables.  
Mi \$.100 Ph \$8.00.
- OSRD 3286 PBL 20287 (2-109)  
Hudson, Bradford R., and Searle, Lloyd V.  
Description of the Tufts tracking trainer. Feb 1944.  
20p photos, diagrs. Mi \$.50 Ph \$2.00.
- OSRD 3291 PBA 63632 (5-474)  
Kracek, F. C., and Benedict, W. S.  
An experimental study of powder gas radiation and temperature. Feb. 1944.  
15ip tables, graphs, photos, diagrs.  
Mi \$.400 Ph \$11.00.
- OSRD 3292 PBL 18886 (2-61)  
Dinwiddie, P. E., and others  
The behavior of target plates under impact loading. Feb 1944.  
32p curves, drawings, photos. Mi \$.50 Ph \$3.00.
- OSRD 3293 PBL 22868 (2-177)  
Lampson, C. W.  
A method of low-frequency compensation of amplifiers to reproduce transients of long duration. Mar 1944.  
19p curves. Mi \$.50 Ph \$2.00.
- OSRD 3296 PBL 19566 (I-1503)  
Sachs, George, and others  
Correlation of information available on the fabrication of Aluminum alloys (NA-126): Final report. Feb 1944.  
186p tables. Mi \$.200 Ph \$13.00.
- OSRD 3300 PBL 4227 (I-304)  
Simpson, O. C., and others  
High-speed compression testing of copper crusher cylinders and spheres. 1944.  
52p illus. Ph \$4.00 Mi \$.100.
- OSRD 3311 PBL 31054 (2-873)  
Jones, Reginald L.  
A low frequency hydrophone calibration system. Jan 1944.  
8bp photos, diagrs. Mi \$.200 Ph \$.600.

## Bibliography

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- OSRD 3312 PBL 12023 (I-831)  
The Psychological Corporation, New York  
Information regarding an analysis of recordings made from the telephone circuits on board a battleship and a destroyer. Feb 1944.  
6p MI \$.50 Ph \$1.00.
- OSRD 3313 PBL 12022 (I-763)  
Curtis, James F.  
The relation between loudness of voice and the intelligibility of airplane interphone communication. (For additional information see PB 12021.) Feb 1944.  
12p illus. MI \$.50 Ph \$1.00.
- OSRD 3315 PBL 12063 (I-1042)  
Shipley, W. C., and others  
Item analysis and evaluation of the scoring stencil of the personal inventory. Feb 1944.  
15p tabs. MI \$.50 Ph \$1.00.
- OSRD 3316 PBL 20291 (2-113)  
Weiss, H. K.  
Tracer stereographs with vertical base line.  
n.d.  
7p drawings. MI \$.50 Ph \$1.00.
- OSRD 3317 See OSRD 1876.
- OSRD 3321 PBL 11213 (I-839)  
Hathaway, Claude M., and Reno, Herbert  
Development of a special oscillograph for Aberdeen Proving Ground. Report No. 2. Dec 1943.  
18p illus. MI \$.50 Ph \$2.00.
- OSRD 3322 PBL 11212 (I-690)  
White, C. B., and others  
The design and construction of a multichannel recording cathode ray oscilloscope. 1944.  
56p MI \$1.00 Ph \$4.00.
- OSRD 3324 PBL 30751 (2-550)  
Rohm and Haas Co., Philadelphia  
Combustible nitro polymers. Final report, Feb 15, 1944. Mar 1944.  
88p MI \$2.00 Ph \$6.00.
- OSRD 3329 PBL 63631 (5-212)  
Critchfield, Charles L.  
On the heating of rotating band. Feb 1944.  
17p tables, graphs. MI \$1.00 Ph \$2.00.
- OSRD 3331 PBL 22869 (2-124)  
Fireman, E. L., and others  
The set added to compressed cylinders after impact. Mar 1944.  
23p MI \$.50 Ph \$2.00.
- OSRD 3334 PBL 18366 (I-1240)  
Lindsay, Donald B., and others  
Radar operator "fatigue": the effect of length and repetition of operating periods on efficiency of performance. Jan 1944.  
38p diagrs, tables, graphs. MI \$.50 Ph \$3.00.
- OSRD 3335 PBL 31048 (2-874)  
Massachusetts Institute of Technology  
Sound transmission measurements made off San Diego from Aug 31 to Sep 10, 1943; with an appendix on the theory of propagation of low frequency sound in deep water, by C. L. Pekeris. Feb 1944.  
82p maps, graphs. MI \$2.00 Ph \$6.00.
- OSRD 3340 PBL 13117 (I-806)  
Barry, James M.
- Tests of odograph in M-29 cargo carrier, cargo-carrying sled, and special trailer. Apr 1944.  
15p MI \$.50 Ph \$1.00.
- OSRD 3344 PBL 18364 (I-1271)  
Lindsay, Donald B., and others  
A study of the SCR-584 basic trainer as a tracking device for learning range tracking. Feb 1944.  
15p tables, diagrs. MI \$.50 Ph \$1.00.
- OSRD 3346 PBL 19831 (I-1524)  
Godfrey, H. J., and others  
Corrosion fatigue failure of aircraft control cables, (N-101): The effect of metallic coatings and lubricants on the fatigue and internal friction properties of aircraft cables. Progress report 4, May 1 1943-Dec 31, 1943. Mar 1944.  
92p drawings, curves, tables. MI \$1.00 Ph \$7.00.
- OSRD 3347 PBL 15851 (I-1409)  
Mehl, R. F., and others  
Improvement in gun steel ingot practices (00-34-3) Progress report, 15 Oct 1943-15 Jan 1944. Feb 1944.  
41p graphs, photos, tables. MI \$.50 Ph \$3.00.
- OSRD 3350 PBL 19502 (I-1346)  
Dorn, J. E., and others  
Formability of magnesium alloy sheet (NA-146): Part III—Evaluation of the deep drawing properties of magnesium alloys at elevated temperatures. Final report. Mar 1944.  
127p diagrs, photos, tables. MI \$1.50 Ph \$9.00.
- OSRD 3353 PBL 4219 (I-285)  
Yoe, John H., and Cole, James W.  
Analysis of Lewisite catalysts for copper. 1944.  
14p Ph \$1.00 MI \$.50.
- OSRD 3354 PBL 4217 (I-351)  
Coleman, George H., and others  
I. Preparation of compounds other than nitrogen mustards. II. Derivatives of C W agents. 1944.  
12p Ph \$1.00 MI \$.50.
- OSRD 3357 PBL 16460 (I-1198)  
Wedell, Carl H.  
A study of the prediction of night lookout performance. Mar 1944.  
42p MI \$.50 Ph \$3.00.
- OSRD 3359 PBL 9406 (I-607)  
Wheeler, T. L., and Fogler, Benjamin  
Development of a test unit for production of oxygen by a regenerative chemical. 1944.  
118p MI \$1.50 Ph \$8.00.
- OSRD 3360 PBL 40625 (3-743)  
Studebaker Corp., South Bend, Ind.  
Light cargo carrier development and redesign. Final report. Jan 1944.  
152p photos, drawings, graphs. MI \$4.00 Ph \$11.00.
- OSRD 3364 PBL 33343 (3-47)  
Bell Telephone Laboratories, New York  
Night surveying and signaling by Infrared (transit survey). Final report. Feb 1944.  
30p photos, diagrs. MI \$1.00 Ph \$2.00.
- OSRD 3366 PBL 4204 (I-365)  
Ball, Eric G., and others  
A study of the ability of compounds with high competition factors to counteract the injurious effects of mustard gas. 1943.  
38p Ph \$3.00 MI \$.50.
- OSRD 3367 PBL 6010 (I-534)  
Woodhouse, J. C.  
Use of crude white arsenic in a Chemical Warfare Service arsenic trichloride plant, to September 1, 1943. 1944.  
15p MI \$.50 Ph \$1.00.
- OSRD 3368 PBL 22819 (2-44)  
Grenell, L. H., and others  
Examination of enemy material (OD-113): Metallurgical examination of two German 15 cm. anticoncrete shells and carriers. Progress report 43, Feb 18, 1944. Mar 1944.  
27p photos, diagrs. MI \$.50 Ph \$2.00.
- OSRD 3369 PBL 8345 (I-540)  
Wheeler, T. L., and Latham, A., Jr.  
Shipboard, liquid oxygen units. Progress report to Feb 3, 1944. 1944.  
51p illus. MI \$1.00 Ph \$4.00.
- OSRD 3370 PBL 33359 (2-825)  
Woodson, R. A.  
Autocollimator buttons. Progress report, Jul 1-Dec 1, 1943. Jan 1944.  
13p MI \$1.00 Ph \$1.00.
- OSRD 3371 PBL 33349 (2-863)  
Fonda, G. R.  
Preparation of stimulated zinc sulfide phosphorescences. Report II—Characteristics. Progress report. Dec 1943.  
13p graphs, tables. MI \$1.00 Ph \$1.00.
- OSRD 3372 PBL 31011 (3-88)  
Primakoff, H.  
The acoustic properties of domes, part II. Feb 1944.  
64p MI \$2.00 Ph \$5.00.  
For part I see PB 31010.
- OSRD 3377 PBL 15875 (I-941)  
Wells, Cyril, and Mehl, Robert F.  
Improvement in wrought gun tubes. Progress report Mar 1944.  
13p MI \$.50 Ph \$1.00.
- OSRD 3384 PBL 5217 (I-483)  
Almy, G. M., and others  
Three to twenty million volt radiography. 1944.  
12p Ph \$1.00 MI \$.50.
- OSRD 3390 PBL 34781 (2-890)  
Shipley, W. C., and others  
The personal inventory, short form (format C): Derivation and preliminary psychiatric validation. Mar 1944.  
13p graphs, tables. MI \$1.00 Ph \$1.00.
- OSRD 3397 PBL 33197 (2-886)  
Karush, W., and Critchfield, C. L.  
The pressure on a cone moving with small yaw at high velocity. Mar 1944.  
22p tables. MI \$1.00 Ph \$2.00.  
See also NDRC ACR A-126; OSRD 1104.

**Bibliography**

- OSRD 3308 PBL 22894 (2-124)  
Hoyt, S. L., and others  
Non-metallic welding back-up strips for armor plate joints (OD-82). Progress reports and final report. Nov 1943-Mar 1944. photos, tables.  
PB OSRD P MI Ph  
22892 2080 56 \$1.00 \$6.00  
22893 3238 35 .50 3.00  
22894 3298 95 1.00 7.00
- OSRD 3309 PBL 33200 (3-13)  
Temple, H. D., and others  
Investigations on new magnetic recording media. Final report. Feb 1944. 120p diagrs, graphs, photos. MI \$3.00 Ph \$9.00.
- OSRD 3401 PBL 33201 (2-889)  
Henkin, H.  
Methods of stability testing. Progress report, Jan 1, 1944. Mar 1944. 27p MI \$1.00 Ph \$2.00.
- OSRD 3403 PBL 11636 (1-807)  
Eastman Kodak Co.  
Progress report on metal mirror problem. Feb 1944. 10p MI \$.50 Ph \$1.00.
- OSRD 3404 PBL 33346 (2-748)  
Tuttle, C. M.  
Telescope shutter, sun-obscuring device. Progress report. Feb 1944. 12p diagrs. MI \$1.00 Ph \$1.00.
- OSRD 3405 PBL 33345 (3-123)  
Eastman Kodak Co., Rochester, N. Y.  
Flicker detector, by Charles A. Morrison and Lloyd A. Jones. Progress reports, May 24, Jun 21, 1943; Feb 29, 1944. Application of flicker detector to sea search, by W. A. Arnold and J. L. Boon. Progress report, Feb 9, 1944. May 1943-Feb 1944. 14p photos, diagr. MI \$1.00 Ph \$1.00.
- OSRD 3406 PBL 15874 (1-1247)  
Cunnick, P. C., and McDowell, J. K.  
Stress relief of welded joints (OD-34-2). Final report, Jan 15, 1944. Mar 1944. 35p graphs, photos, tables. MI \$.50 Ph \$3.00.
- OSRD 3407 PBL 22501 (1-157)  
Grenell, L. H., and others  
Examination of enemy material (OD-119): Metallurgical examination of German MG-151 gun parts. Progress report 44, Feb 1, 1944. Mar 1944. 16p charts, photos. MI \$.50 Ph \$1.00.
- OSRD 3409 PBL 12020 (1-757)  
Lindsay, Donald B.  
Vision as related to proficiency in oscilloscope operation. Feb 1944. 14p illus. MI \$.50 Ph \$1.00.
- OSRD 3410 PBL 6023 (1-472)  
Yee, John H., and Lindsay, Charles H.  
Acidimetric and iodometric methods for analysis of carbon monoxide in air. 1944. 42p Ph \$3.00 MI \$.50.
- OSRD 3411 PBL 30783 (2-808)  
Martin, F. J., and Messerly, G. M.  
The detonation velocity of explosive mixtures containing ammonium nitrate. Progress report, Jan 27, 1944. Mar 1944. 46p graphs, tables. MI \$1.00 Ph \$4.00.
- OSRD 3413 PBL 28540 (2-304)  
Mihalyi, J., and Bishop, F. M.  
Production design of high-speed anti-glare shutter. Progress report. May 1943. 14p diagrs, photos. MI \$1.00 Ph \$1.00.
- OSRD 3417 PBL 22502 (2-24)  
Grenell, L. H., and others  
Examination of enemy material (OD-113). Examination of ten rounds of German 20 mm. H. E. ammunition. Progress report 45. Mar 1944. 24p photos, tables. MI \$.50 Ph \$2.00.
- OSRD 3418 PBL 22503 (1-1574)  
Grenell, L. H., and others  
Examination of enemy material (OD-113): Metallurgical examination of a Japanese rifle 6.5 mm. (caliber .25). 38th year, pattern M1905. Progress report 42, Feb 7, 1944. Mar 1944. 13p charts, photos. MI \$.50 Ph \$1.00.
- OSRD 3419 PBL 4238 (1-285)  
Northrop, John H., and others  
I. Method for the determination of H<sub>2</sub> and thiadiglycol in drops of dyed chargings. II. Determination of HM1, HM2, HM3, and CG by potentiometric titrations. III. Cell for potentiometric determination of various gases in air. 1944. 38p Ph \$3.00 MI \$.50.
- OSRD 3420 PBL 21112 (1-1498)  
Clark, D. S., and others  
The influence of impact velocity on the tensile properties of three types of ship plate: MS, HTS, STS. Mar 1944. 36p graphs, photos, tables. MI \$.50 Ph \$3.00.
- OSRD 3421 PBL 15263 (1-939)  
Herzfeld, Karl F.  
On longitudinal stresses in guns. Mar 1944. 12p MI \$.50 Ph \$1.00.
- OSRD 3422 PBL 58226 (4-968)  
Gulf Research and Development Co., Pittsburgh, Pa.  
Experimental investigations in connection with high angle dirigible bombs: The photoelectric target seeking bomb. Progress report, Jan 1, 1944. Jan 1944. 153p photos, diagrs, graphs. MI \$4.00 Ph \$11.00.
- OSRD 3428 PBL 15843 (1-1251)  
Loring, C. H., and others  
Improvement of low alloy armor steels (OD-87): Part V. The effect of draw practice on the mechanical properties of six armor plate steels; Sep 1943-Feb 1944. Mar 1944. 41p graphs, tables. MI \$.50 Ph \$3.00.
- OSRD 3424 PBL 16473 (1-1322)  
Gillett, M. M., and others  
Flash welding of alloy steels for ordnance (OD-86): Progress report, Jul 15, 1943 to Oct 15, 1943. Mar 1944. 136p graphs, tables, photos. MI \$1.50 Ph \$10.00.
- OSRD 3425 PBL 20209 (1-1498)  
Clark, D. S., and others  
Behavior of metals under dynamic conditions (OD-11) (MS-109): Some static and dynamic properties of Zamac II die cast alloy in relation to its use in Mark 140 (M1R3) fuse. Progress report, Jan 31, 1944. Mar 1944. 30p drawings, graphs, tables. MI \$.50 Ph \$3.00.
- OSRD 3428 PBL 4212 (1-287)  
Lazier, W. A., and Scott, S. L.  
Synthesis of organic arsenicals from unsaturated compounds. 1944. 20p Ph \$2.00 MI \$.50.
- OSRD 3434 PBL 15873 (1-939)  
Hildorf, W. G., and others  
Control of basic open hearth melting practice for the manufacture of wrought gun tubes. Progress report. Mar 1944. 8ip graphs. MI \$1.00 Ph \$6.00.
- OSRD 3436 PBA 4210 (1-348)  
Northrop, John H.  
Automatic detection of gases which react with silver ions by means of silver electrodes. 1944. 11p Ph \$1.00 MI \$.50.
- OSRD 3437 PBA 4189 (1-287)  
Hellerman, Leslie, and others  
Investigation of detoxinants or decontaminants for mustard gas. Enzyme studies and other chemical studies bearing upon the action of certain vesicants. Formal progress report through June 30, 1943. Jan 17, 1944. 76p MI \$1.00 Ph \$6.00.
- OSRD 3441 PBL 31047 (2-876)  
Wyman, Jeffries, and others  
Laboratory studies of the acoustic properties of wakes. I. Scattering and absorption of sound by the wake of a small submersible propeller. II. Role of bubbles in wakes. Mar 1944. 67p diagrs, graphs, photos. MI \$2.00 Ph \$6.00.
- OSRD 3443 PBL 18358 (1-1240)  
Lindsay, Donald B., and others  
Visual status of ASV radar operators. (Applied psychology panel: Selection and training of oscilloscope operators. Research rep. 9.) Mar 1944. 11p MI \$.50 Ph \$1.00.
- OSRD 3444 PBL 4446 (1-465)  
Conver, Bernard J., and others  
Detailed fireroom operating procedures for destroyer escort vessels, turbo-electric and turbo-gearred types. 1944. 15p illus. Ph \$1.00 MI \$.50.
- OSRD 3445 PBL 12163 (1-982)  
Seashore, Harold, and others  
The effect of early introduction of sending code upon learning to receive. Jun 1944. 10p table, graph. MI \$.50 Ph \$1.00.
- OSRD 3446 PBL 27161 (2-800)  
Mallina, R. F., and Dietz, J. M.  
Light-weight rocket projectors. Apr 1944. 24p photos, drawings. MI \$1.00 Ph \$2.00.
- OSRD 3447 PBL 22870 (2-50)  
Worthington, L. W., and others  
Thermal effects of propellant gases in erosion vents and in guns. May 1944. 222p tables. MI \$2.50 Ph \$15.00.
- OSRD 3451 PBL 90617 (3-725)  
Foxboro Co., Foxboro, Mass.  
A study of factors determining accuracy of tracking by means of handwheel control. Sep 1942. 45p MI \$1.00 Ph \$3.00.  
See also PB 40612-PB 40616.

- OSRD 3452 PBL 40616 (3-725)  
Foxboro Co., Foxboro, Mass.  
A supplemental study of factors determining accuracy of tracking by means of handwheel control. Dec 1942.  
28p photos, graphs. Mi \$1.00 Ph \$2.00.  
See also PB 40612-PB 40615, PB 40617.
- OSRD 3453 PBL 40615 (3-724)  
Foxboro Co., Foxboro, Mass.  
Handwheel speed and accuracy of tracking. May 1943.  
17p graphs, tables.  
See also PB 40612-PB 40614, PB 40616, 40617.
- OSRD 3454 PBL 40614 (3-724)  
Foxboro Co., Foxboro, Mass.  
Inertia, friction and diameter in handwheel tracking. Sep 1943.  
21p tables, graphs, diagrs. Mi \$1.00 Ph \$2.00.  
See also PB 40612, 40613, 40615-40617.
- OSRD 3455 PBL 40613 (3-725)  
Foxboro Co., Foxboro, Mass.  
Relative accuracy of handwheel tracking with one and both hands. Nov 1943.  
14p table, photos, graphs. Mi \$1.00 Ph \$1.00.  
See also PB 40614-PB 40616, PB 40612.
- OSRD 3461 PBL 32207 (2-867)  
Klotz, Irving H.  
Aqueous hydrolysis of  $\text{CHCl}_3$ . Progress report. Apr 1944.  
9p graphs. Mi \$1.00 Ph \$1.00.
- OSRD 3462 PBL 21119 (2-2)  
Fair, G. M., and Renn, C. E.  
Biological nitrification of urine. Final report. Apr 1944.  
58p Mi \$1.00 Ph \$4.00.
- OSRD 3464 PBL 23713 (2-466)  
Brillouin, Leon  
On light scattering by spheres: II. Apr 1944.  
44p curves, diagra. Mi \$.50 Ph \$3.00.  
For Part I see PB 23712.
- OSRD 3465 PBL 15262 (I-938)  
Herzfeld, Karl F.  
An improved approximation formula for stresses in cylinders. Apr 1944.  
10p Mi \$.50 Ph \$1.00.
- OSRD 3467 PBM 5929 (I-581)  
Smith, Homer W., and others  
Studies on the cause of death after systemic intoxication with the  $\beta$ -chloroethyl vesicants, to March 1, 1944. 1944.  
87p illus. Ph \$7.00 Mi \$1.00.
- OSRD 3475 PBL 18320 (I-1231)  
Adams, J. K., and others  
The reliability and precision of the NDRC and Bausch and Lomb Intarpupillometers. (Applied Psychology Panel: Selection and training of fire controllers (R). Rept 2.) Mar 1944.  
26p diagrs, tables. Mi \$.50 Ph \$2.00.
- OSRD 3477 PBL 10540 (I-1501)  
Hunter, M. A., and others  
Physical and stress corrosion properties of magnesium alloy sheet (NA-147): Progress report. Apr 1944.  
61p tables. Mi \$1.00 Ph \$5.00.
- OSRD 3478 PBL 27358 (2-418)  
Brattain, R. R., and Beeck, O.  
Memorandum on test of thermistor bolometer as receiver for National Technical Laboratories routine infrared spectrophotometer. Jan 1944.  
14p curve, diagr., tables. Mi \$1.00 Ph \$1.00.
- OSRD 3480 PBA 4216 (I-348)  
Yoe, John H., and Overholser, Lyle G.  
Colorimetric determination of fluorine in fluoro-organic compounds. 1944.  
8p Mi \$1.00 Ph \$2.00
- OSRD 3481 PBL 4220 (I-286)  
Yoe, John H., and others  
Determination of fluorine in fluoro-organic compounds. 1944.  
23p tables. Ph \$2.00 Mi \$.50.
- OSRD 3482 PBL 9399 (I-908)  
Aston, J. G.  
Tests of performance of the Collins type expansion engine built by Clark Bros. Co., Inc., to January 26, 1944. Apr 1944.  
27p photos, diagrs. Mi \$.50 Ph \$2.00.
- OSRD 3483 PBL 9400 (I-631)  
Aston, J. G.  
Combined oxygen vapor pressure and gas thermometer, to January 6, 1944. 1944.  
46p illus. Mi \$.50 Ph \$4.00.
- OSRD 3484 PBL 9398 (I-759)  
Aston, J. G.  
Estimation of oil contamination in air from compressors of portable air rectification units, to Jan 19, 1944. Apr 1944.  
75p illus. Mi \$1.00 Ph \$5.00.
- OSRD 3490 PBL 12019 (I-586)  
Kurtz, Albert K., and others  
The standardization of code speeds. May 1944.  
37p Mi \$.50 Ph \$3.00.
- OSRD 3505 PBL 12018 (I-768)  
The Psychological Corporation  
The relative intelligibility of typical methods of holding the T-17 microphone for communication in noise. May 1944.  
10p illus. Mi \$.50 Ph \$1.00.
- OSRD 3506 PBL 4607 (I-370)  
Dawson, R. D., and White, E. R.  
Flame thrower fuels. 1944.  
39p Ph \$3.00 Mi \$.50.
- OSRD 3507 PBA 4627 (I-319)  
Kirkpatrick, E. C.  
Chemical ignition of flame throwers. 1944.  
15p Ph \$1.00 Mi \$.50.
- OSRD 3508 PBA 4192 (I-316)  
Carver, E. K., and Bauer, E. E.  
Consistency of Napalm gels.  
11p Mi \$.50 Ph \$3.00.
- OSRD 3509 PBL 18328 (I-1231)  
Adams, J. K., and others  
The design, accuracy, construction, and use of a range correction computer. Mar 1944.  
14p photo, diagrs. Mi \$.50 Ph \$1.00.
- OSRD 3510 PBM 4197 (I-366)  
Thomson, John F., Goldmesser, Eugene, and Savit, Joseph  
Means of improving inflation of life rafts at low temperatures. Apr 1944.  
39p diagrs, charts. Mi \$.50 Ph \$3.00.
- Tests for decontamination of Lewisite on human skin.  
50p Mi \$.50 Ph \$4.00.
- OSRD 3511 PBL 31016 (2-951)  
Snow, W. R., and others  
Transmission survey, Block Island Sound. Completion report. Mar 1944.  
108p tables, diagrs, charts, graphs. Mi \$3.00 Ph \$8.00.
- OSRD 3513 PBL 15872 (I-940)  
Trolana, Alexander R.  
Investigation of the metallographic and physical properties of new types of gun steels, Final Report. Apr 1944.  
50p illus. Mi \$.50 Ph \$4.00.
- OSRD 3515 PBL 22913 (2-250)  
Egan, J. P., and others  
The articulation efficiency of nine carbon microphones for use at low altitudes. Jun 1944.  
73p diagrs, photos. Mi \$1.00 Ph \$5.00.
- OSRD 3516 PBL 22847 (I-1601)  
Karlin, J. E., and others  
Auditory tests of the ability to hear speech in noise. Sep 1944.  
78p photos, diagrs, tables. Mi \$1.00 Ph \$6.00.
- OSRD 3522 PBL 4640 (I-370)  
Brown, A. L., and Cousins, C. W.  
Flow of Napalm thickened gasoline in pipes (part I) and nozzles (part II) 1944.  
58p Ph \$4.00 Mi \$1.00.
- OSRD 3523 PBL 9377 (I-760)  
Rushton, J. H., and others  
Central Engineering Laboratory, Section II. I (oxygen), NDRC. Monthly progress reports, Mar 1, 1944 through Mar 1945, excepting Oct 1944. 1944-85.  
1,244p Mi \$12.50 Ph \$83.00—Series. Includes progress reports:
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| 9377 | 4879 | 1.00   | 5.00    |
| 9380 | 5040 | 1.50   | 7.00    |
- See also OSRD 4452; OSRD 5153.
- OSRD 3524 PBL 8349 (I-603)  
Aston, J. G., and Pfister, June  
Calculation of the number of plates in an air rectification tower, 1944.  
205p illus. Mi \$2.50 Ph \$14.00.
- OSRD 3525 PBL 21114 (I-1436)  
McAdams, W. H., and others  
Means of improving inflation of life rafts at low temperatures. Apr 1944.  
39p diagrs, charts. Mi \$.50 Ph \$3.00.

## Bibliography

- OSRD 3534 PBL 16476 (I-1246)  
Anderson, E. A., and Peirce, W. H.  
Prevention of stress-corrosion cracking of cartridge brass by protective coatings or surface treatment (OD-25): Final report, Aug 15, 1942-Feb 16, 1944. Apr 1944.  
32p Mi \$.50 Ph \$3.00.
- OSRD 3536 PBL 22504 (I-1571)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of German armor piercing tungsten carbide rounds of 28/20, 37, and 50 mm. calibers. Progress report 41, Jan 24, 1944. Apr 1944.  
18p drawings, photos. Mi \$.50 Ph \$2.00.
- OSRD 3537 PBL 15859 (I-1322)  
Doan, G. E., and others  
Evaluation of weldability by direct welding tests (OD-37-I): The quantitative measurement of welding response by bead welds. Final report, Suppl. Dec 22, 1943. Apr 1944.  
17p graph, tables. Mi \$.50 Ph \$2.00.
- OSRD 3538 PBL 22505 (I-1569)  
Evans, R. M., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of a German 75 mm. H. E. hollow charge shell. Progress report 46, Mar 10, 1944. Apr 1944.  
13p photos, tables. Mi \$.50 Ph \$1.00.
- OSRD 3539 See OSRD 4052.
- OSRD 3540 PBL 31055 (2-873)  
Jones, Reginald L.  
Wide range hydrophone for low sound fields. Mar 1944.  
50p photos, diagrs. Mi \$1.00 Ph \$4.00.
- OSRD 3541 PBL 22912 (2-468)  
Kryter, K. D., and others  
Experiments with earplugs: (i) Their effect on the intelligibility of speech; (ii) Their use as protection against gun blast. Jun 1944.  
40p curves, diagrs, photos, tables. Mi \$.50 Ph \$3.00.
- OSRD 3542 PBL 22470 (2-51)  
Pigford, R. L., and Chilton, T. H.  
Drop dispersion measurements by use of a laboratory mortar. Apr 1944.  
22p photos, diagrs, graphs. Mi \$.50 Ph \$2.00.
- OSRD 3543 PBL 22471 (2-51)  
Pigford, R. L., and Chilton, T. H.  
The use of thickened vesicants in chemical shells, a literature survey. Apr 1944.  
22p tables. Mi \$.50 Ph \$2.00.
- OSRD 3548 PBL 22506 (I-1572)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of a series of six 7.9 mm. MG-17 German aircraft gun barrels, 1937-42, and four I3 to 20 mm. Progress report 45, Mar 1, 1944. Apr 1944.  
18p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 3549 PBL 16766 (I-1252)  
Pochapsky, T. E., and Hase, W. J.  
Damping capacity of heat-resisting metals for gas turbine parts (H-102). Progress report, Sep 1, 1943-Mar 31, 1944. Apr 1944.  
39p photo, diagrs. Mi \$.50 Ph \$3.00.
- OSRD 3550 PBL 32194 (2-825)  
Brinkley, Stuart R., Jr., and others  
Tables of the properties of air along the Hugoniot curve and the adiabatics terminating in the Hugoniot curve. Progress report. Apr 1944.  
43p tables. Mi \$1.00 Ph \$3.00.
- OSRD 3551 PBA 4202 (I-1454)  
Coleman, George H., and others  
Preparation and stability of the nitrogen mustards. Progress report, Jun 21, 1943-Jan 8, 1944. Apr 1944.  
14p Mi \$.50 Ph \$1.00.
- OSRD 3554 PBL 19578 (I-1410)  
Sachs, George, and others  
Correlation of information available on the fabrication of aluminum alloys (NA-126): Final report. Section IV, Survey of the properties of new aluminum alloys: Part IV, The aluminum alloy XA755-sheet. Apr 1944.  
100p Mi \$1.00 Ph \$7.00.
- OSRD 3557 PBA 4203 (I-351)  
Cohen, Barnett, and others  
Studies on the kinetics of 8-chloroethylamines and their products in dilute aqueous solution. 1944.  
106p Ph \$8.00 Mi \$1.50.
- OSRD 3558 PBA 4237 (I-288)  
Shreve, Morris R., and others  
Mustard gas from thioglycol and thionyl chloride.  
52p illus. Ph \$4.00 Mi \$1.00.
- OSRD 3560 PBL 24904 (2-324)  
Ray, Peter  
Polyvinyl sheeting exposed to tropical conditions. Mar 1944.  
7p tables. Mi \$.50 Ph \$1.00.
- OSRD 3566 PBL 19787 (I-1531)  
Blomquist, Alfred T., and Ryan, James F., Jr.  
Report on studies related to the stability of PETN, to Feb 29, 1944. May 1944.  
44p photos, diagrs, tables. Mi \$.50 Ph \$3.00.
- OSRD 3567 PBA 30746 (2-626)  
Cason, James  
Studies on nitramines and nitrosodihydroxylamines. Final report, March 1, 1944. May 1944.  
57p Mi \$2.00 Ph \$4.00.
- OSRD 3569 PBL 24905 (2-225)  
Puckett, Allen E.  
The model supersonic wind-tunnel project. Final report. Apr 1944.  
108p diagrs, drawings, graphs, photos, plans, tables. Mi \$1.50 Ph \$8.00.
- OSRD 3574 PBL 4187 (I-322)  
Standard Oil Development Co.  
Development of portable flame thrower, E2. Second progress report, April 15, 1944.  
83p Mi \$1.00 Ph \$6.00.
- OSRD 3579 PBL 22898 (2-36)  
Dix, E. H., Jr., and others  
Fatigue and impact characteristics and notch effect in tension of artificially-aged aluminum alloys (NA-126). Progress report. Apr 1944.  
25p graphs, tables. Mi \$.50 Ph \$2.00.
- OSRD 3580 PBL 22896 (2-38)  
Norton, John T., and others

Effect of locked up stresses on ballistic performance of welded armor—Part I. (OD-106). Final report, Feb 1, 1944. Apr 1944.  
106p diagrs, graphs, photos. Mi \$1.50 Ph \$8.00.

OSRD 3582 PBL 12062 (I-899)  
Berry, R. M., and others  
The comparability of formats A and B of the personal inventory. Apr 1944.  
8p Mi \$.50 Ph \$1.00.

OSRD 3584 PBL 16751 (I-1412)  
Schuh, A. E., and Boyles, Alfred  
Improvements in and extension of centrifugal casting methods for production of miscellaneous war material items (OD-108). Final report, Mar 15, 1944. Apr 1944.  
18p Mi \$.50 Ph \$2.00.

OSRD 3585 PBL 22507 (I-1571)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of German 50 mm. H. E. shells with long and short cartridge cases. Progress report 50, Mar 23, 1944. Apr 1944.  
24p diagrs, photos, tables. Mi \$.50 Ph \$2.00.

OSRD 3586 PBL 22508 (I-1571)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of German 50 mm. A. P.-H. E. (mohobloc) shells with long and short cartridge cases. Progress report 47, Mar 16, 1944. Apr 1944.  
25p drawings, photos, tables. Mi \$.50 Ph \$2.00.

OSRD 3587 PBL 22509 (2-57)  
Levoe, C. E., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of a Japanese aircraft exhaust stack and collector ring. Progress report 48, Mar 21, 1944. Apr 1944.  
13p photos. Mi \$.50 Ph \$1.00.

OSRD 3588 PBL 22510 (I-1567)  
Cady, J. R., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of German and Italian 20 mm. armor-piercing ammunition, 1938-43. Progress report 51, Mar 24, 1944. Apr 1944.  
27p diagrs, photos, tables. Mi \$.50 Ph \$2.00.

OSRD 3591 PBL 19652 (I-1353)  
Friedrichs, K. O., and others  
Theoretical studies on the flow through nozzles and related problems. Apr 1944.  
100p diagrs. Mi \$1.00 Ph \$7.00.

OSRD 3593 PBA 4211 (I-369)  
Austin, P. R., and others  
A study of special fabrics for protection against chemical warfare agents. 1944.  
69p illus. Ph \$5.00 Mi \$1.00.

OSRD 3598 PBA 18871 (2-27)  
Prescott, Samuel C.  
Troop feeding programs; a survey of rationing and subsistence in the United States Army, 1775 to 1940. Final report Mar 1944.  
339p tables. Mi \$3.50 Ph \$23.00.

## Bibliography

37

- OSRD 3599 PBL 18429 (I-1113)  
 Tucker, C. W., and others  
 Residual stresses in cold-drawn nonferrous alloys: An X-ray study, Final report, Part II, Nov 1, 1943-Mar 1, 1944 (OD-25). May 1944.  
 98p graphs. MI \$1.00 Ph \$7.00.
- OSRD 3600 PBL 18430 (3-38)  
 Tucker, C. W., and others  
 Residual stresses in cold-drawn nonferrous alloys: An x-ray study (OD-25). Progress report, Nov 1, 1943-Mar 15, 1944. May 1944.  
 19p tables, graph. MI \$.50 Ph \$2.00.  
 See also PB 18424, 18429, 18432, 18446, 18484-18485, 18742, 18744, 18781.
- OSRD 3601 PBL 31027 (3-51)  
 Foldy, L. L.  
 General theory of the propagation of sound through a liquid containing air bubbles. Apr 1944.  
 5ip graphs. MI \$2.00 Ph \$4.00.  
 See also PB 31028.
- OSRD 3603 PBA 4199 (I-333)  
 Carver, E. K., Beguin, A. E., and Calhoun, J. M.  
 Study of special fabrics for NDRC. Final report, March 10, 1943, 1944.  
 64p MI \$1.00 Ph \$5.00.
- OSRD 3605 PBL 8018 (I-602)  
 Bartlett, Paul D., and Lewis, Edward S.  
 The reactivity of chlorine in 88%-dichloro-diethyl ether, 3,4-dichlorotetrahydrothiophene, and bis-1,3-dichloro-2-propyl sulfide, to Aug 27, 1943, 1944.  
 10p MI \$.50 Ph \$1.00.
- OSRD 3607 PBL 19509 (I-1414)  
 Wyman, L. L.  
 High temperature properties of light alloys (NA-137): Final report. Part I—Aluminum. Part II—Magnesium. Apr, Sep 1944.  
 Tables, graphs.  
 PB 19509 153p MI \$2.00 Ph \$11.00 (OSRD 3607)  
 PB 19510 109p MI \$1.50 Ph \$8.00 (OSRD 4150)
- OSRD 3608 PBL 40612 (3-725)  
 Foxboro Co., Foxboro, Mass.  
 Tracking with illuminated and nonilluminated oscilloscopes. Apr 1944.  
 35p tables, graphs, drawings.  
 MI \$1.00 Ph \$3.00.  
 See also PB 40613-PB 40617.
- OSRD 3613 PBL 4445 (I-985)  
 Conner, B. J., and others  
 Operation of destroyer and destroyer escort distilling plants. 1944.  
 14p Ph \$1.00 MI \$.50.
- OSRD 3614 PBL 25408 (2-229)  
 Jones, S. Murray, and Simmons, Harold H.  
 Experimental seven man pneumatic life raft No. 1, Jul 1943.  
 30p drawings, photos. MI \$1.00 Ph \$2.00.
- OSRD 3616 PBL 4198 (I-383)  
 Perley, G. A., and Eckfeldt, E. L.  
 Automatic potentiometric recording equipment for determination of chemical warfare agents to March 20, 1944. 1944.  
 18p MI \$.50 Ph \$2.00.
- OSRD 3617 PBL 23704 (2-672)  
 Neuman, John von  
 Proposal and analysis of a new numerical method for the treatment of hydrodynamical shock problems. Mar 1944.  
 34p curves. MI \$.50 Ph \$3.00.
- OSRD 3618 PBL 18321 (I-1270)  
 Knauth, E. B.  
 The precision of internal adjustment settings of the mark 42 rangefinder. (Applied Psychology Panel: Selection and training of fire control-men (R) Rept 3.) Apr 1944.  
 11p MI \$.50 Ph \$1.00.
- OSRD 3619 PBL 13299 (2-821)  
 Frederiksen, Norman  
 Validity of an experimental battery of altitude tests at the Ordnance and Gunnery Schools, Washington Navy Yard. Apr 1944.  
 36p tables. MI \$.50 Ph \$3.00.
- OSRD 3620 PBM 5930 (I-429)  
 Henriques, F. C., and others  
 The mechanism of cutaneous injury by mustard gas. An experimental study using mustard prepared with radioactive sulfur, to November 10, 1943. 1944.  
 12ip illus. Ph \$9.00 MI \$1.50.
- OSRD 3620-A PBM 5917 (I-560)  
 Moritz, A. R., and Henriques, F. C., Jr.  
 Additional studies pertaining to the mechanism of cutaneous injury by mustard gas. An experimental study using mustard prepared with radioactive sulfur, to Oct 1, 1945. 1945.  
 46p Ph \$4.00 MI \$.50.
- OSRD 3623 PBL 21881 (3-42)  
 Grenell, L. H., and others  
 Examination of enemy material: Metallurgical examination of a Japanese 50-mm. grenade discharger. Progress report 53, Mar 31, 1944. May 1944.  
 14p photos, tables. MI \$.50 Ph \$1.00.
- OSRD 3624 PBL 18768 (I-1248)  
 Dowdell, R. L., and others  
 Density volume changes associated with phase changes in cartridge brass (OD-117): Final report, Jul 9, 1943-Mar 31, 1944. May 1944.  
 24p photos, tables, graphs. MI \$.50 Ph \$2.00.
- OSRD 3625 PBL 22511 (I-1574)  
 Grenell, L. H., and others  
 Examination of enemy material (OD-113) (AC-77): Metallurgical examination of a Japanese rifle 7.7 mm. (caliber .303"), model 99. Progress report 52, Mar 31, 1944. May 1944.  
 18p photos, table. MI \$.50 Ph \$2.00.
- OSRD 3627 PBL 11216 (I-797)  
 Kouwenhoven, W. B.  
 Progress report on the development of methods for determining the proper seating of gilding metal rotating bands on 105 mm. shells in production May 1944.  
 25p illus. MI \$.50 Ph \$2.00.
- OSRD 3628 PBL 27149 (2-298)  
 Ingerman, Earl  
 A method for testing resistance of metals to surface cracking under conditions similar to those obtaining in guns. Nov 1943.  
 49p photos, tables. MI \$1.00 Ph \$4.00.
- OSRD 3629 PBL 28542 (2-218)  
 Carnegie Institution of Washington, Mount Wilson Observatory  
 Tests of aerial camera lenses. Mar 1944.  
 50p graphs, photos, tables.  
 MI \$1.00 Ph \$4.00.
- OSRD 3632 PBL 43035 (3-790)  
 Rose, A.  
 Improved sensitivity of television equipment. Progress report, Dec 1943-Jan 1944. Jan 1944.  
 1p MI \$1.00 Ph \$1.00.  
 See also PB 43037-PB 43039.
- OSRD 3633 PBL 43040 (3-790)  
 Kell, R. D.  
 Improved sensitivity of television equipment. Progress report No. 4, Dec 1, 1943-Feb 1, 1944. Feb 1944.  
 1p photos, diagrs. MI \$1.00 Ph \$1.00.  
 See also PB 43037-PB 43039.
- OSRD 3636 PBL 21880 (I-1491)  
 Grenell, L. H.  
 Examination of enemy materiel: Metallurgical examination of German 50 mm. A.P.C.-H.E. rounds with long and short cartridge cases. Progress report 54, Apr 7, 1944. May 1944.  
 29p photos, drawings, tables.  
 MI \$.50 Ph \$2.00.
- OSRD 3641 PBL 15853 (I-1348)  
 Field, A. L., and others  
 Development of armor welding electrodes (OD-36-2): Influence of the type of armor plate on the properties of armor weldments. Final report, Mar 1944. May 1944.  
 29p drawings, photos, tables.  
 MI \$.50 Ph \$2.00.
- OSRD 3643 PBL 21878 (I-1484)  
 Grenell, L. H., and others  
 Examination of enemy materiel: Metallurgical examination of a Japanese 7.7 mm. model 92 heavy machine gun of 1938. Progress report 57, Apr 15, 1944. May 1944.  
 14p photos, tables. MI \$.50 Ph \$1.00.
- OSRD 3651 PBL 18457 (I-1109)  
 Cross, H. C., and Simmons, W. F.  
 Heat-resisting metals for gas turbine parts (H-102). I Sep 43-15 Mar 44. Progress report on, 10 May 1944.  
 18ip photos. MI \$2.00 Ph \$13.00.
- OSRD 3652 See OSRD 3523.
- OSRD 3653 PBL 5935 (I-429)  
 Herriott, Roger H., and others  
 Reactions of H. with enzymes and proteins. 1944.  
 46p illus. MI \$.50 Ph \$4.00.
- OSRD 3658 PBL 11586 (I-674)  
 Mason, C. W.  
 Microscopical identification of explosives. Mar 1944.  
 37p MI \$.50 Ph \$3.00.
- OSRD 3661 PBL 21877 (I-1485)  
 Grenell, L. H., and others  
 Examination of enemy materiel: Metallurgical examination of sections of 15, 30, and 50 kilogram Japanese antipersonnel bombs. Progress report 58, Mar 18, 1944. May 1944.  
 6p tables. MI \$.50 Ph \$1.00.
- OSRD 3662 PBL 15871 (I-939)  
 Mehl, Robert F., and others  
 Improvement in gun steel ingot practices. Progress report. May 1944.  
 59p tables, diagrs. MI \$1.00 Ph \$4.00.

- OSRD 3665 PBL 21876 (I-1482)  
Grenell, L. H., and others  
Examination of enemy materiel: Metallurgical examination of four German duplex welded 37 mm. A. P. rounds and three German 37 mm. A. P. H. E. projectiles. Progress report 56, Apr 14, 1944. May 1944.  
17p photos, tables. MI \$.50 Ph \$2.00.
- OSRD 3667 PBL 5508 (I-483)  
Almy, G. H., and others  
Three to twenty million volt radiography. Progress report. Section 1. Development of the betatrons. Section 2. Development of porcelain envelope for vacuum tubes. June 1, 1944.  
23p MI \$.50 Ph \$2.00.
- OSRD 3668 PBL 5843 (I-354)  
Almy, G. H., and Adams, G. D.  
Three to twenty million volt radiography. Summary report on 20,000,000 volt betatron. 17p illus. Ph \$2.00 MI \$.50.
- OSRD 3670 PBA 4213 (I-348)  
Tarbell, D. S., and others  
The use of thiocarbazones as arsenical detectors. 1944.  
53p Ph \$4.00 MI \$.100.
- OSRD 3675 PBL 16472 (I-1188)  
Voldrich, C. B., and others  
Flash welding of alloy steels for ordnance. Progress report, Oct 15, 1943-Jan 15, 1944. Apr 1944.  
64p tables, diagrs, photos. MI \$.100 Ph \$.50.
- OSRD 3677 PBL 5509 (I-412)  
Burrill, E. A., Jr.  
A summary report on the application of high voltage electrostatic x-ray generators to radiography. 1944.  
32p illus. Ph \$3.00 MI \$.50.
- OSRD 3681 PBL 19776 (I-1366)  
Dienel, M. F.  
Sound level measurements in U. S. Military airplanes, volume 2. Jun. 1944.  
75p MI \$.100 Ph \$.50.  
See also OSRD 4648.
- OSRD 3682 See OSRD 1524.
- OSRD 3683 See OSRD 1524.
- OSRD 3689 PBL 16471 (I-1188)  
Voldrich, C. B., and others  
Flash welding of alloy steels for ordnance. Progress report, Jan 15, 1944-Mar 15, 1944. May 1944.  
65p diagrs, graphs, photomicrographs. MI \$.100 Ph \$.50.
- OSRD 3692 PBL 3324B (3-54)  
White, Harvey E.  
The use of red light for under water searching in shallow sea water. Apr 1944.  
8p photo, diagrs. MI \$.100 Ph \$.100.
- OSRD 3694 PBL 16767 (I-1246)  
Butta, Allison, and Frye, John H.  
Investigation of the effects of impurities on the ferro-magnetism of nonferrous alloys (OD-156): Progress report, Jan 15-Apr 15, 1944. May 1944.  
35p diagrs, tables, graphs. MI \$.50 Ph \$.300.
- OSRD 3695 PBL 20208 (I-1408)  
Clark, D. S., and others  
Behavior of metals under dynamic conditions (NO-11) (NS-109): Influence of impact velocity on the tensile properties of NE 8715, NE 9415, SAE 1045, and SAE 1090 steels. Progress report, Mar 15, 1944. May 1944.  
51p photomicrographs, graphs, tables. MI \$.100 Ph \$.400.
- OSRD 3696 PBL 20207 (I-1409)  
Dowez, P. L., and others  
Behavior of metals under dynamic conditions (NO-11) (NS-109): Influence of impact velocity on the tensile properties of furniture steel sheets. Progress report, Mar 24, 1944. May 1944.  
37p photos, drawings, diagrs, graphs. MI \$.50 Ph \$3.00.
- OSRD 3698 PBL 33210 (2-970)  
DeGarmo, E. Paul, and others  
Residual stresses in ship welding. Progress report, Nov 1, 1943-Feb 29, 1944. May 1944.  
51p diagrs, graphs, tables. MI \$2.00 Ph \$4.00.  
See also PB 33209, PB 33211, and PB 61376.
- OSRD 3699 PBL 8350 (I-536)  
Aston, J. G.  
Tests of performance of portable-unit columns for air rectification, to Jan 6, 1944. 1944.  
267p illus. MI \$.300 Ph \$18.00.
- OSRD 3702 PBL 19830 (I-1579)  
Stout, R. D., and others  
Methods of testing weldability of steel plates and shapes: Part I. Final report, Mar 1, 1944. May 1944.  
34p diagrs, drawings, photos, tables. MI \$.50 Ph \$3.00.
- OSRD 3703 PBL 21879 (I-1482)  
Gambrill, C. H., and others  
Examination of enemy materiel: Analysis of captured Japanese ethyl fluid. Progress report 55, Apr 8, 1944. May 1944.  
6p MI \$.50 Ph \$.100.
- OSRD 3711 PBL 50835 (4-482)  
Crawford, Bryce L., Jr.  
Rocket fundamentals. May 1944.  
25p drawings, graphs, tables. MI \$.60 Ph \$17.00.
- OSRD 3712 PBL 18369 (I-127)  
Lindsay, Donald B., and others  
A validation study of oscilloscope operator tests. Apr 1944.  
13p tables. MI \$.50 Ph \$.100.
- OSRD 3713 PBL 19545 (I-1407)  
Barrett, Charles S., and others  
Deformation characteristics of magnesium alloys: Third quarterly progress report (MA-148): Dec 15, 1943-Mar 15, 1944. May 1944.  
44p MI \$.50 Ph \$3.00.
- OSRD 3714 PBL 15621 (I-1012)  
Dickinson, Roscoe G., and Kraus, Douglas L.  
A remote indicating cup anemometer with magnetic coupling. (Progress report) to April 10, 1944. May 1944.  
33p tabs, graphs, photos, drawings, diagrs. MI \$.50 Ph \$3.00.
- OSRD 3715 PBL 21873 (I-1417)  
Grenell, L. H., and others  
Examination of enemy materiel: Metallurgical examination of two German 10.5 cm. A. P. C. E. C. rounds. Progress report 61, May 1, 1944. Jun 1944.  
15p photos. MI \$.50 Ph \$1.00.
- OSRD 3721 PBL 28702 (2-375)  
Mayall, N. U.  
Pursuit curve characteristics. Apr 1944.  
108p graphs, curves. MI \$3.00 Ph \$8.00.
- OSRD 3722 PBL 28543 (2-834)  
Carnegie Institution of Washington, Mount Wilson Observatory  
Graphs of pursuit curve characteristics, for a pursuit plane flying directly toward the target. Feb 1944.  
30p tables, graphs. MI \$.100 Ph \$2.00.
- OSRD 3723 PBL 18322 (I-1270)  
Krafft, E. B.  
The accuracy and precision of student operators' zero-sets on the mark 4 radar. (Applied Psychology Panel: Selection and training of fire controlmen (R) Rept 4.) May 1944.  
12p MI \$.50 Ph \$.100.
- OSRD 3724 PBL 43044 (3-790)  
Rose, Albert, and others  
The image orthicon: A description of its construction and operation. Feb 1944.  
39p photos, drawings. MI \$.100 Ph \$3.00.
- OSRD 3725 PBL 43046 (3-863)  
Cawein, Madison  
Standard dissector comparison camera, model #2. Final report. Mar 1944.  
32p photos, diagrs, curves. MI \$.100 Ph \$3.00.
- OSRD 3743 PBL 16757 (I-1022)  
Boegehold, A. L., and Weinman, E. W.  
Heat treatment of national emergency steels for use in tanks, combat cars, gun mounts, and other ordnance material (OD-115). Progress report, Oct 1-Feb 24, 1944. Jun 1944.  
88p tables, graphs. MI \$.100 Ph \$4.00.
- OSRD 3744 See OSRD 3143.
- OSRD 3745 PBL 21875 (I-1405)  
Grenell, L. H., and others  
Examination of enemy materiel: Metallurgical examination of one 120 mm. Japanese high-explosive naval projectile and three fuzes. Progress report 50, Apr 25, 1944. Jun 1944.  
22p tables. MI \$.50 Ph \$2.00.
- OSRD 3746 PBL 21874 (I-1405)  
Grenell, L. H.  
Examination of enemy materiel: Metallurgical examination of six rounds of Japanese 20 mm. H. E. ammunition. Progress report 60, May 1, 1944. Jun 1944.  
18p MI \$.50 Ph \$2.00.
- OSRD 3747 PBL 12166 (I-769)  
Seashore, Harold, and Stuntz, Stephen  
Training radio operators to copy code through interference. Jun 1944.  
15p MI \$.50 Ph \$.100.
- OSRD 3748 PBL 12169 (I-902)  
Haagen, C. Hess  
Intelligibility measurement: Techniques and procedures used by the Voice Communication Laboratory. May 1944.  
21p MI \$.50 Ph \$2.00.

## Bibliography

39

OSRD 3753 England, J. L.	PBL 63633 (5-213)	OSRD 3776 Pease, Robert M., and McLean, John H.	PBA 15615 (I-986)	OSRD 3799 Nielsen, Harold H., and Bell, Ely E.	PBL 39713 (3-586)
A-93M. Apparatus for collecting solid particles discharged from a rifle; A-94M. A simple optical sighting device. May 1944. 8p photos. MI \$1.00 Ph \$1.00.		Charcalite: a calcium chloride impregnated charcoal drying agent. (Progress report) to May 20, 1944. Jun 1944. 14p tabs. MI \$.50 Ph \$1.00.		Transmission of infrared radiation through atmospheric media. Progress report. May 1944. 64p graphs, tables. MI \$2.00 Ph \$5.00.	
OSRD 3755 Shipley, W. C., and others	PBL 12061 (I-1042)	OSRD 3778 Adams, J. K., and Fowler, H. M.	PBL 18323 (I-1268)	OSRD 3800 Collins, S. C., and McMahon, H. O.	PBL 9415 (I-603)
A comparison of personal inventory scores with service records one year after testing. Jun 1944. 17p MI \$.50 Ph \$2.00.		Report on the reliability of two forms of an activity preference blank. (Applied Psychology Panel: Selection and training of fire controlmen (R). Rep't 5.) Jun 1944. 72p tables. MI \$1.00 Ph \$5.00.		A light-weight, automatic, mechanical oxygen generator, to May 31, 1944. 1944. 65p illus. MI \$1.00 Ph \$5.00.	
OSRD 3756 Satter, G. A.	PBL 13298 (I-982)	OSRD 3780 Kirkwood, John G., and others	PBL 32223 (2-826)	OSRD 3801 Kell, R. D.	PBL 43041 (3-865)
Selection of items for the U. S. Navy general classification test—Form 2, and the U. S. Navy test of reading and arithmetical reasoning—Form 2. Jun 1944. 43p MI \$.50 Ph \$3.00.		Buckling instability of thin cylindrical shells under external static loading. Progress report. Jun 1944. 25p graph, tables. MI \$1.00 Ph \$2.00.		Improved sensitivity of television equipment. Progress report No. 5, Feb 1—Apr 1, 1944. Apr 1944. 27p photos, diagrs. MI \$1.00 Ph \$2.00. See also PB 43037—PB 43040.	
OSRD 3758 National Research Corporation, Boston	PBA 22472 (2-238)	OSRD 3785 Wright, W. F., and others	PBL 4613 (I-331)	OSRD 3802 Egan, J. P.	PBL 22848 (I-1600)
Report of lithium research, Mar 15, 1943. Jun 1944. 22p diagrs, tables. MI \$.50 Ph \$2.00.		Installation of aerial odograph in OAIO 43-43843. 1944. 14p illus. Ph \$1.00 MI \$.50.		Articulation testing methods II. Nov 1944. 95p tables, graphs. MI \$1.00 Ph \$7.00.	
OSRD 3760	See OSRD 3523.	OSRD 3787 California Institute of Technology	PBA 28551 (2-303)	OSRD 3803 Pennsylvania University. The Johnson Foundation	PBA 16418 (I-1200)
OSRD 3761 Standard Oil Development Co.	PBL 4609 (I-442)	Studies and investigations in connection with the development of hard protective coatings for optical plastics. May 1944. 78p tables, diagrs. MI \$2.00 Ph \$5.00. See also PB 28552.		Report on crosatin as a treatment for fungus proofing optical instrument. Jun 1944. 27p photos. MI \$.50 Ph \$2.00.	
High altitude flight tests of aimable clusters for the AN-M69 bomb. 1944. 60p illus. Ph \$4.00 MI \$1.00.		OSRD 3791 Dorn, John E., and Thomsen, Erich G.	PBL 19501 (I-1248)	OSRD 3804 Mason, C. W.	PBA 11572 (I-905)
OSRD 3762 Texas Co., Beacon Laboratory	PBL 5242 (I-701)	Formability of magnesium alloy sheet (NA-146): Final report, Part IV—Forming stretch flanges in the Guerin press, Apr 15, 1944. Jun 1944. 50p photos, curves. MI \$.50 Ph \$4.00. See also PB 28552.		Drop reactions for the microscopical identification of arsenical chemical warfare agents. May 1944. 37p illus. MI \$.50 Ph \$3.00.	
Kirkpatrick, E. C.	PBA 4626 (I-275)	OSRD 3792 Jackson, L. R., and others	PBL 19518 (I-1578)	OSRD 3805 Agy, Vaughn L.	PBL 13116 (I-805)
Methacrylate interpolymers as gasoline thickening agents. 1944. 16p Ph \$2.00 MI \$.50.		Fatigue properties of magnesium alloys and structures: Fatigue properties of magnesium alloy sheet—Part II (NA-145). Final report Mar., 1944. Jun 1944. 89p photos, drawing, curves. MI \$1.00 Ph \$6.00.		Report on tests of aerial odograph in RA-29 at Wright Field, Dayton, Ohio from February 2, 1944 to April 13, 1944. Jun 1944. 5p MI \$.50 Ph \$1.00.	
OSRD 3768 Lobo, M. E., and Williams, B.	PBL 9414 (I-805)	OSRD 3795 Agy, V. L.	PBL 4614 (I-330)	OSRD 3812 Anthony, H. L.	PBL 21869 (I-1407)
Liquid air fractionation, to May 15, 1944. 402p illus. MI \$4.50 Ph \$27.00.		Tests on serial odograph in PBH-3S No. 01877, December 10, 1943, to January 28, 1944 at U. S. Naval Air Station, Quonset Point, R. I. 1944. 12p illus. Ph \$1.00 MI \$.50.		Examination of enemy materiel: Metallurgical examination of two Japanese oxygen cylinders. Progress report 71, May 17, 1944. Jun 1944. 12p photos. MI \$.50 Ph \$1.00.	
OSRD 3770 Wells, Cyril, and Mehl, Robert F.	PBL 15870 (I-941)	OSRD 3796 Eyring, Henry, and others	PBL 24906 (2-212)	OSRD 3813 Grenell, L. H.	PBL 21870 (I-1407)
Improvement in wrought gun tubes. Progress report. Jun 1944. 24p MI \$.50 Ph \$2.00.		The chemical reaction in a detonation wave. Progress report. Jun 1944. 68p graphs, tables. MI \$1.00 Ph \$5.00.		Examination of enemy materiel: Metallurgical examination of the Japanese 80 mm, high-explosive naval projectiles. Progress report 67, May 15, 1944. Jun 1944. 12p photos. MI \$.50 Ph \$1.00.	
OSRD 3772 McIntyre, G. H., and Elliott S. B.	PBA 5960 (I-373)	OSRD 3797 Ellison, D. G., and Imus, H. A.	PBL 18330 (I-1273)	OSRD 3814 Grenell, L. H., and others	PBL 21871 (I-1498)
Aluminum soaps for thickening gasoline. 1944. 26p illus. MI \$.50 Ph \$2.00.		Memorandum on the construction and calibration of the NDRC interpupillometer. Jun 1944. 12p MI \$.50 Ph \$1.00.		Examination of enemy materiel: Metallurgical examination of a Japanese 1/3 KG anti-parked aircraft bomb. Progress report 63, May 9, 1944. Jun 1944. 7p photos. MI \$.50 Ph \$1.00.	
OSRD 3774 Klotz, Irving M.	PBL 15616 (I-1216)	OSRD 3798 Shrader, E. F.	PBL 31025 (2-951)	OSRD 3817 Seashore, H., and others	PBL 12167 (I-982)
Factors in canister design and tube testing: critical bed depth and the nature of gas flow through charcoal. Progress rep't. to May 18, 1944. Jun 1944. 24p graphs, tables. MI \$.50 Ph \$2.00.		Production testing of projectors. May 1944. 78p curves, diagrs, drawings, photos. MI \$2.00 Ph \$8.00.		A comparative study of three methods of teaching code in the early weeks of the course. Jun 1944. 38p MI \$.50 Ph \$2.00.	
OSRD 3775 Kratz, A. P., and others	PBL 28993 (2-156)				
Study of the use of air curtains for fog dissipation. Progress report, Mar 31, 1944. Jun 1944. 61p photos, tables, graphs, drawings. MI \$2.00 Ph \$5.00.					

- OSRD 3818 PBL 21872 (I-1417)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of German 20 mm. MG-161 Mauser aircraft machine gun. Progress report 65, May 11, 1944, Jun 1944.  
12p photos. MI \$.50 Ph \$2.00.
- OSRD 3821 PBM 4232 (I-288)  
Salzberg, P. L., and others  
Non-irritant protective ointments. 1944.  
18p Ph \$1.00 MI \$.50.
- OSRD 3827 PBL 19832 (2-38)  
McMaster, R. C., and others  
Radiographic and fluoroscopic methods of inspection of spot welds in aluminum alloys, Parts I and II, Final report, Jan-Sep 1944.  
Graphs, tables, photos.  

PB	Pt	P	MI	Ph
19832	I	195	\$2.00	\$13.00
19826	II	178	2.00	12.00
- OSRD 3829 PBL 4231 (I-285)  
Price, Charles C., and others  
A pellet DBT test for Lewisite and similar arsenical CW agents in water. 1944.  
9p MI \$.50 Ph \$1.00.
- OSRD 3830 PBA 6020 (I-533)  
Yoe, John H., and others  
Determination of fluorine in fluoro-organic compounds in low concentrations in air. 1944.  
20p MI \$.50 Ph \$2.00.
- OSRD 3830a Suppl. PBA 6021 (I-574)  
Yoe, John H., and others  
Determination of fluorine in fluoro-organic compounds in low concentrations in air, supplement, to Jun 6, 1944. 1944.  
2p illus. MI \$.50 Ph \$1.00.
- OSRD 3834 PBL 27294 (2-667)  
Churchill, H. E.  
Development and tests of modification equipment for amphibious or jungle operation and improved deep water track propulsion of M-29 cargo carrier light. Final report, Apr. 1944.  
105p photos, graphs, diagra. MI \$3.00.  
Ph \$7.00.
- OSRD 3835 PBL 25407 (2-383)  
Hecker, Lawrence G., and Nuttall, Clifford J., Jr.  
Sparkman and Stephens, Inc., project No. 500, summary report covering: 1. Track propelled amphibians and conversions that Sparkman & Stephens, Inc., has assisted in developing; 2. The use of completely submerged tracks for propulsion in the water. May 1944.  
142p diagrs, graphs, photos, tables. MI \$3.00 Ph \$10.00.
- OSRD 3836 PBL 21854 (I-1435)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of a Japanese naval aircraft gear oil pump. Progress report 64, May 10, 1944, Jun 1944.  
12p photos. MI \$.50 Ph \$1.00.
- OSRD 3837 PBL 20206 (I-1577)  
Duwez, P. L., and Clark, D. S.  
Behavior of metals under dynamic conditions: (NO-11) (MS-109): Influence of impact velocity on the tensile properties of some metals and alloys. Progress report, Apr. 15, 1944, Jun 1944.  
—
- 40p curves, diagra, drawings, tables. MI \$.50 Ph \$3.00.
- OSRD 3838 PBL 21868 (I-1435)  
Lavos, C. E., and others  
Examination of enemy material: Metallurgical examination of three types of Japanese aircraft exhaust valves and two types of intake valves. Progress report 66, May 12, 1944, Jun 1944.  
18p photos. MI \$.50 Ph \$2.00.
- OSRD 3839 PBL 21855 (I-1405)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of Japanese 63 kilogram bombs, fuzes, and gaines. Progress report 62, May 8, 1944 Jun 1944.  
20p photos, tables. MI \$.50 Ph \$2.00.
- OSRD 3841 PBL 43056 (3-727)  
Shiffman, Max, and Friedman, Bernard  
On the best location of a mine near the sea bed. May 1944.  
— 76p tables, graphs. MI \$2.00 Ph \$6.00.
- OSRD 3843 PBL 21856 (I-1405)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of six rounds of Japanese 20 mm. A. P. ammunition. Progress report 72, May 18, 1944, Jun 1944.  
14p photos. MI \$.50 Ph \$1.00.
- OSRD 3844 PBL 21867 (I-1404)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of Japanese 25 mm. Hotchkiss incendiary and H. E. incendiary tracer rounds. Progress report 68, May 15, 1944, Jul 1944.  
19p photos, tables. MI \$.50 Ph \$2.00.
- OSRD 3845 PBL 21857 (I-1435)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of a Japanese Sakae-12 engine oil tank. Progress report 69, May 15, 1944, Jul 1944.  
20p photos. MI \$.50 Ph \$2.00.
- OSRD 3846 PBL 21858 (I-1401)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of Czechoslovakian tank armor plate. Progress report 75, Jun 2, 1944, Jul 1944.  
7p photos, tables. MI \$.50 Ph \$1.00.
- OSRD 3853 PBL 25404 (2-381)  
Baker, J. G.  
A combat vehicle of high mobility designed for transportation by air. Final report, Jun 1944.  
18p drawings, photos. MI \$1.00 Ph \$2.00.
- OSRD 3858 PBL 18374 (I-1274)  
Lindsley, Donald B., and others  
Comparison of range tracking methods: tracking to a fixed hairline versus tracking to a rotating hairline. Jul 1944.  
11p tables. MI \$.50 Ph \$1.00.
- OSRD 3859 PBL 15633 (I-1444)  
Rouse, Hunter  
Wind-tunnel studies of the diffusion of gas in schematic urban districts, to December 31, 1943. Jul 1944.  
22p diagrs, graphs, photos. MI \$.50 Ph \$2.00.
- OSRD 3861 See OSRD 3523.
- OSRD 3862 PBL 12171 (I-900)  
Curtis, James F.  
Report on training studies in voice communication: I. Can intelligibility of voice communication be increased by training in voice technique? Jul 1944.  
23p MI \$.50 Ph \$2.00.
- OSRD 3863 PBL 12168 (I-902)  
Hibbitt, George W., Mallory, Louis A.  
Experimental investigation of a course for telephone talkers. Jul 1944.  
13p MI \$.50 Ph \$1.00.
- OSRD 3864 PBL 12142 (I-1252)  
Miklowitz, J.  
The propagation of the plastic zone along a tension bar of material having a well-defined plastic limit. Jul 1944.  
60p MI \$1.00 Ph \$4.00.
- OSRD 3866 PBL 34128 (3-48)  
U. S. National Defense Research Committee and others  
The effect of imperfections in the reticle field of stereoscopic range finders. Report to the services No. 83: Div. 7, Fire Control. Jul 1944.  
29p MI \$1.00 Ph \$2.00.
- OSRD 3868 PBL 15261 (I-1250)  
Herzfeld, K. F., and Griffing, Virginia  
Deduction of practical formulas for the stress in the mantle of a shell due to band pressure and powder-gas pressure. Jun 1944.  
27p diagrs. MI \$.50 Ph \$2.00.
- OSRD 3869 PBA 63634 (5-285)  
Jensen, Einar  
Notes on the potentiometric titration of iron. Jul 1944.  
1ip diagr, graph, table. MI \$.100 Ph \$.100.
- OSRD 3872 PBL 31028 (3-51)  
Carstensen, E. L., and Foldy, L. L.  
Propagation of sound through a liquid containing bubbles. Part II: Experimental results and theoretical interpretation. Jun 1944.  
85p graphs, drawings. MI \$2.00 Ph \$6.00.  
For Part II see PB 31027.
- OSRD 3875 PBL 30764 (2-556)  
Carter, R. O., Jr., and others  
Modified Dearda method for the determination of nitrogen in nitrocellulose. Progress report, Jul 1944.  
8p diagr. MI \$.100 Ph \$.100.
- OSRD 3876 PBL 4022 (I-405)  
Smith, Kensley R., and others  
Memorandum on how to teach gunnery. 1946.  
24p Ph \$2.00 MI \$.50.
- OSRD 3885 PBL 19829 (2-41)  
Zickrick, Lyall, and others  
Bi-metallic copper-steel driving bands for projectiles: (NO-159), Part I—Experimental driving bands for the naval 40 mm. projectile; Part II—Centrifugal casting of duplex copper-steel tubing for driving bands. Final report. Jul 1944.  
43p photos. MI \$.50 Ph \$3.00.

## Bibliography

4  
COPY

1  
47

41

- OSRD 3886 PBL 20205 (I-1500)  
 Duwez, P. E., and others  
 Behavior of metals under dynamic conditions (MS-109). The propagation of plastic strain in compression. Progress Report, May 15, 1944. Jul 1944.  
 16p drawings, graphs, tables. MI \$1.00 Ph \$4.00.
- OSRD 3888 PBL 16463 (I-1044)  
 University of Rochester, Institute of Optics  
 Design of wide-angle telescopes for tanks. Dec 1943.  
 16p diagrs. MI \$.50 Ph \$2.00.
- OSRD 3891 PBL 21862 (I-1434)  
 Grenell, L.H., and others  
 Examination of enemy materiel: Metallurgical examination and performance tests of a Japanese Yokogawa aircraft magneto. Progress report 70, Jun 16, 1944. Jul 1944.  
 16p photos. MI \$.50 Ph \$2.00.
- OSRD 3892 PBL 21863 (I-1556)  
 Grenell, L.H., and others  
 Examination of enemy materiel: Metallurgical examination of a Japanese Navy 1 KVA alternating current generator repair kit. Progress report 78, Jun 8, 1944. Jul 1944.  
 9p photos. MI \$.50 Ph \$1.00.
- OSRD 3893 PBL 21864 (I-1407)  
 Grenell, L.H., and others  
 Examination of enemy materiel: Metallurgical examination of armor plate from Japanese type I.F. "Oscar" Mark II SE fighter. Progress report 79, Jun 8, 1944. Jul 1944.  
 16p photos. MI \$.50 Ph \$1.00.
- OSRD 3894 PBL 21865 (I-1405)  
 Grenell, L.H., and others  
 Examination of enemy materiel: Metallurgical examination of Japanese 70 mm. and 75 mm. H.E. ammunition. Progress report 74, May 31, 1944. Jul 1944.  
 16p tables, photos. MI \$.50 Ph \$1.00.
- OSRD 3895 PBL 21860 (I-1494)  
 Grenell, L.H., and others  
 Examination of enemy materiel: Metallurgical examination of four Japanese 50 mm. grenades and six fuzes. Progress report 76, Jun 3, 1944. Jul 1944.  
 16p tables, photos. MI \$.50 Ph \$1.00.
- OSRD 3896 PBL 21861 (I-1494)  
 Grenell, L.H., and others  
 Examination of enemy materiel: Metallurgical examination of Japanese 37-mm. high explosive shells. Progress report 77, Jun 7, 1944. Jul 1944.  
 16p photos. MI \$.50 Ph \$1.00.
- OSRD 3900 PBL 24907 (2-215)  
 Messerly, G.W.  
 The use of rotating drum camera for the measurement of the velocities of shell or bomb fragments. Progress report, Apr 26, 1944. Jul 1944.  
 31p diagrs, graphs, tables. MI \$.50 Ph \$3.00.
- OSRD 3902 PBA 32199 (2-867)  
 McGraw, F.C.  
 The preparation of solid materials for dispersion as aerosols. Final report to May 10, 1944. Jul 1944.  
 16p photos, microphotographs, drawings, tables. MI \$1.00 Ph \$3.00.
- OSRD 3903 PBL 12086 (I-877)  
 Ladenburg, Rudolf, and Winckler, John  
 Description of flash Integrator—Model I. May 1944.  
 16p MI \$.50 Ph \$1.00.
- OSRD 3904 PBL 5502 (I-1289)  
 Bakelite Corp., Research and Development Dept.  
 Effects of atmospheric exposure on paints previously submerged in the sea. Progress report, period ending May 31, 1944. Jan 1946.  
 16p MI \$.50 Ph \$1.00.
- OSRD 3905 See OSRD 1524.
- OSRD 3908 PBL 4444 (I-500)  
 Conner, B. J., and others  
 Lesson plans for 3/50 gunnery instruction, destroyer escort patrol frigate crews. 1944.  
 12p Ph \$1.00 MI \$.50.
- OSRD 3914 PBA 4218 (I-363)  
 Yee, John H., and Overholser, Lyle G.  
 Studies of the determination of the acidity of CC. 1944.  
 13p Ph \$1.00 MI \$.50.
- OSRD 3917 PBL 21865 (I-1407)  
 Grenell, E.W., and others  
 Examination of enemy materiel: Metallurgical examination of two Japanese 7.7 mm aircraft machine guns of 1938 and 1942. Progress report 81, Jun 9, 1944. Jul 1944.  
 23p photos. MI \$.50 Ph \$2.00.
- OSRD 3918 PBL 21866 (I-1496)  
 Grenell, L.H., and others  
 Examination of enemy materiel: Metallurgical examination of three 40 mm. Japanese naval projectiles. Progress report 82, Jun 12, 1944. Jul 1944.  
 16p photos. MI \$.50 Ph \$2.00.
- OSRD 3919 PBL 21853 (I-1404)  
 Grenell, L. H., and others  
 Examination of enemy materiel: Metallurgical examination of Japanese .30 caliber and .50 caliber disintegrating cartridge link belts. Progress report 83, Jun 14, 1944. Jul 1944.  
 6p photos, tables. MI \$.50 Ph \$1.00.
- OSRD 3920 PBL 22512 (2-67)  
 Grenell, L. H., and others  
 Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of a Japanese aircraft oil radiator. Progress report 84, Jun 17, 1944. Jul 1944.  
 9p photos, tables. MI \$.50 Ph \$1.00.
- OSRD 3921 PBL 22513 (2-67)  
 Grenell, L. H., and others  
 Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of selected parts from Japanese type 100, radial, 1450 h.p., aircraft engines. Progress report 80, Jun 9, 1944. Jul 1944.  
 20p photos. MI \$.50 Ph \$2.00.
- OSRD 3922 PBL 22514 (2-67)  
 Hardone, R. M.  
 Examination of enemy materiel (OD-113) (AC-77): Design features and performance characteristics of the Japanese hand and electric inertia starter. Progress report 86, Jun 23, 1944. Jul 1944.  
 14p curves, photos. MI \$.50 Ph \$1.00.
- OSRD 3923 PBM 4230 (I-365)  
 Bell, Eric G., and others
- A study of the composition of the blood and urine of rabbits and rats as affected by the administration of H. 1944.  
 13p Ph \$1.00 MI \$.50.
- OSRD 3928 PBL 4229 (I-447)  
 Woodhouse, J.C., and others  
 Storage characteristics and stabilization of HM-1 and HM-3. 1944.  
 18p Ph \$2.00 MI \$.50.
- OSRD 3929 PBA 4235 (I-287)  
 Elley, H.W., and others  
 The preparation of ethanedithiol. 1944.  
 30p illus. Ph \$2.00 MI \$.50.
- OSRD 3930 PBA 4201 (I-285)  
 Woodhouse, J. C., and others  
 Ultra-violet absorption studies of Levinstein mustard. (OSRD 3930). 1944.  
 9p illus. Ph \$1.00 MI \$.50.
- OSRD 3932 PBL 22871 (2-246)  
 Jessup, Ralph S., and Prosen, Edward J.  
 Heats of combustion of celluloses and nitro-celluloses. Jul 1944.  
 20p tables. MI \$.50 Ph \$2.00.
- OSRD 3940 PBL 19500 (I-1248)  
 Dorn, John E., and others  
 Formability of magnesium alloy sheet (KA-146): Final report, Part V, Forming shrink flanges on the Guerin press, Jun 14, 1944. Jul 1944.  
 55p photos, drawings. MI \$1.00 Ph \$4.00.
- OSRD 3945 PBL 33348 (3-24)  
 Meese, G. E.  
 Road delineation and nocturnal vehicular driving with ultraviolet radiation. Demonstration conducted by the Quartermaster Board, Camp Lee, Va. Supplementary report. Apr. 1944.  
 15p photos. MI \$1.00 Ph \$1.00.  
 See also PB 33367.
- OSRD 3947 PBL 33368 (2-863)  
 Tonda, G. R.  
 Survey of zinc sulfide phosphors capable of stimulation. Report III. Jul 1944.  
 13p graphs, diagrs. MI \$1.00 Ph \$1.00.
- OSRD 3948 PBL 33362 (2-824)  
 Rochester Button Company  
 The manufacture of autocollimating lens units. Final report. Jul 1944.  
 2p MI \$1.00 Ph \$1.00.
- OSRD 3950 PBL 32188 (2-828)  
 Rice, O.K., and Ginell, Robert  
 The pressure wave produced by an underwater explosion: Part VIII. The case of cylindrical symmetry, II. Progress report. Jul 1944.  
 57p curves, tables. MI \$2.00 Ph \$4.00.
- OSRD 3952 PBL 16453 (I-1200)  
 Pennsylvania, University of  
 Report on methods of prevention of fungus fouling of optical instruments in the Canal Zone. Jul 1944.  
 9p drawing. MI \$.50 Ph \$1.00.
- OSRD 3957 PBL 20203 (I-1409)  
 Duwez, P.E., and Clark, D.S.  
 Behavior of metals under dynamic conditions (MS-109): A preliminary investigation of the mechanism of penetration from the standpoint of strain propagation. Progress report, Jun 1, 1944. Jul 1944.  
 15p photos, graphs. MI \$.50 Ph \$1.00.

## Bibliography

- OSRD 3958 PBL 4209 (I-285)  
Northrop, John H.  
Potentiometric titration of  $\text{NH}_3$  solutions with silver nitrate. 1944.  
9p diagrams. Ph \$1.00 Mi \$.50.
- OSRD 3960 PBL 34767 (3-267)  
Newton, R. R., and Rosser, J. B.  
Preliminary report on the motion of a fin-stabilized rocket during the burning period. Aug. 1944.  
12p graphs. Mi \$.50 Ph \$1.00.  
See also PB 34768.
- OSRD 3961 PBL 18331 (I-1268)  
Beier, D. C., and others  
Lesson plans on selection and training for rangefinder officers' course, fire controlmen (O), rangefinder operators, naval training schools, Fort Lauderdale, Florida. Jul 1944.  
33p Mi \$.50 Ph \$3.00.
- OSRD 3962 PBL 12059 (I-899)  
Berry, R. N., and others  
Results from the long and short forms of the personal inventory and the general classification test. Jul 1944.  
11p Mi \$.50 Ph \$1.00.
- OSRD 3963 PBL 12060 (I-1042)  
Shipley, W. C., and Graham, C. H.  
Final report in summary of research on the personal inventory and other tests. Aug 1944.  
39p Mi \$.50 Ph \$3.00.
- OSRD 3964 PBL 4207 (I-352)  
Fuson, R. C.  
The behavior of hexamine in Levinstein mustard. 1944.  
32p Ph \$3.00 Mi \$.50.
- OSRD 3966 PBL 22515 (I-1575)  
Grenell, L. H., and others  
Examination of enemy material (OD-113) (AC-77): Metallurgical examination of Japanese 81 mm. high explosive light mortar shell complete with type 93 fuze. Progress report 87, Jun 27, 1944. Jul 1944.  
9p photos. Mi \$.50 Ph \$1.00.
- OSRD 3967 PBL 22516 (2-67)  
Grenell, L. H., and others  
Examination of enemy material (OD-113) (AC-77): Metallurgical examination of a Japanese Sakae-12 aircraft engine mount. Progress report 73, Jun 24, 1944. Jul 1944.  
11p diagrs, tables, photos. Mi \$.50 Ph \$1.00.
- OSRD 3969 PBL 18324 (I-1181)  
Adams, J. K., and others  
A test-retest reliability study of the Bausch and Lomb ortho-rater with naval personnel. (Applied Psychology Panel: Selection and training of rangefinder and radar operators. Rept. 6.) Aug 1944.  
36p diagrs. Mi \$.50 Ph \$3.00.
- OSRD 3970 PBL 18325 (I-1181)  
Adams, J. K., and others  
The influence of the visual tasks required of the personnel in the 16 weeks fire controlmen (O) training course upon their visual proficiency. (Applied psychology panel: Selection and training of rangefinder and radar operators. Rept. 7.) Aug 1944.
- OSRD 3972 See OSRD 3523.
- OSRD 3975 PBL 15614 (I-986)  
Hills, Gordon F., and Dickinson, B. N.  
Use of aminated phenol-formaldehyde xerogels as gas adsorbents (Progress report) to June 28, 1944. Aug 1944.  
10p tabs. Mi \$.50 Ph \$1.00.
- OSRD 3978 PBL 13297 (I-904)  
Peterson, D. A.  
A statistical evaluation of the United States Navy officer qualification test—Forms 2 and 3. Aug 1944.  
46p Mi \$.50 Ph \$4.00.
- OSRD 3983 PBL 18865 (2-84)  
Brewer, S. D.  
Studies on the stability of PETN and pentolite: Progress report, Jun 1944. Aug 1944.  
96p graphs, photos, diagrs. Mi \$1.00 Ph \$7.00.  
Appendix III gives corrections to OSRD 1414, PB 18864, by Russell McGill, also on this subject.
- OSRD 3989 PBL 28618 (2-437)  
McAdams, W. H., and Meas, C. C.  
Development of portable generator for repressurizing bottles for portable flame throwers. Progress report. Aug 1944.  
36p diagrs, table. Mi \$1.00 Ph \$3.00.
- OSRD 3990 PBL 28605 (2-391)  
Klassam, Phillip  
Soundings and beach contours with airplane cameras mounted athwartships. Aug 1944.  
7p Mi \$1.00 Ph \$1.00.
- OSRD 3993 PBL 4215 (I-480)  
Mason, C. W., and others  
Microscopical properties of oxidation derivatives of arsenicals. 1944.  
60p illus. Ph \$4.00 Mi \$1.00.
- OSRD 3994 PBL 4234 (I-347)  
Mason, C. W., and Delamater, G. B.  
Drop reactions for the microscopical identification of nitrogen mustards. 1944.  
17p illus. Ph \$2.00 Mi \$.50.
- OSRD 3995 PBL 4233 (I-287)  
Mason, C. W., and others  
Microscopical properties of derivatives of nitrogen mustards with picric acid. 1944.  
21p Mi \$.50 Ph \$2.00.
- OSRD 3996 PBL 4200 (I-480)  
Mason, C. W., and Delamater, G. B.  
Microscopical properties of derivatives of arsenicals with N-pentamethylenedithiocarbonate. 1944.  
53p illus. Ph \$4.00 Mi \$1.00.
- OSRD 3997 PBL 18329 (I-1273)  
Knauff, E. B.  
The precision of internal adjustment settings by student operators and experienced operators on stereoscopic rangefinders. Aug 1944.  
13p Mi \$.50 Ph \$1.00.
- OSRD 3999 PBL 22517 (2-63)  
Reichelderfer, C. A., and others  
Examination of enemy material (OD-113) (AC-77): Metallurgical examination of fuel tank from Japanese aircraft "Oscar." Progress report 85, Jun 24, 1944. Aug 1944.
- OSRD 4000 PBL 22518 (I-1568)  
Bartholomew, E. L., Jr., and others  
Examination of enemy material (OD-113) (AC-77): Metallurgical investigation of a German 170 mm. gun tube. Progress report 81, Jul 15, 1944. Aug 1944.  
18p photos. Mi \$.50 Ph \$2.00.
- OSRD 4001 PBL 22519 (2-62)  
Grenell, L. H., and others  
Examination of enemy material (OD-113) (AC-77): Metallurgical and chemical examination of a Japanese landing gear and wheel. Progress report 88, Jun 29, 1944. Aug 1944.  
20p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 4010 PBL 12170 (I-982)  
Seashore, Harold, and Kurtz, Albert K.  
Analysis of errors in copying code. Aug 1944.  
53p Mi \$1.00 Ph \$4.00.
- OSRD 4016 PBL 19803 (I-1559)  
Exline, Paul G., Dashiel, J. M.  
Some characteristics of aircraft engine fuels: Their influence on capacitor type tank gauges. Jun 1944.  
48p drawings, graphs, tables. Mi \$.50 Ph \$4.00.
- OSRD 4019 PBL 23706 (2-310)  
Handelman, G. H., and Prager, W.  
Aerodynamic pursuit curves for overhead attacks. Aug 1944.  
62p curves, tables. Mi \$1.00 Ph \$5.00.
- OSRD 4020 PBL 23702 (2-257)  
Brillouin, Leon  
A coil yielding a single dipole moment. Jul 1944.  
32p diagrs, tables. Mi \$.50 Ph \$3.00.
- OSRD 4023 PBL 19805 (2-77)  
Abrams, H. H., and others  
Speech in noise: A study of the factors determining its intelligibility. Sep 1944.  
153p graphs, tables. Mi \$2.00 Ph \$11.00.
- OSRD 4024 PBL 18866 (2-323)  
Westheimer, F. H., and others  
The kinetics of the nitration of phenols. Oct 1944.  
32p tables, graphs. Mi \$.50 Ph \$3.00.
- OSRD 4025 PBL 30766 (2-790)  
Carmack, Marvin, and others  
The oxynitration of benzene to nitrophenols. Progress report, Oct 1942-Apr 1944. Oct 1945.  
155p tables, drawings. Mi \$4.00 Ph \$11.00.
- OSRD 4026 PBL 18863 (2-243)  
Bachmann, Werner E.  
The oxynitration of benzene to 2, 4-dinitrophenol. Feb 1945.  
25p Mi \$.50 Ph \$2.00.
- OSRD 4027 PBL 28611 (2-391)  
Singleton, Robert  
Examination and test of the flashlight perspective projector. Jul 1944.  
16p photos, sketches. Mi \$1.00 Ph \$2.00.
- OSRD 4028 PBL 31056 (2-873)  
Jones, Reginald L.  
Response characteristics of hydrophones, as influenced by their position with respect to sea bottom. May 1944.

## Bibliography

43

- OSRD 4029 PBL 4208 (I-429)  
Henriques, F. C., Jr., and others  
An experimental investigation of the physical mechanisms concerned in the production of casualties by flame thrower attack. Aug 1944.  
44p Ph \$3.00 Mi \$.50
- OSRD 4030 PBL 24891 (3-43)  
Hill, G. Albert, and Clarke, R. G.  
Underwater flares. Aug 1944.  
11p drawing. Mi \$.50 Ph \$1.00.
- OSRD 4031 PBL 25405 (2-312)  
Sparkman and Stephens, Inc., New York  
Development and tests of the 4 ton 4 x 4 GPA amphibian (QMC4). Final report. Jul 1944.  
57p drawings. Mi \$2.00 Ph \$4.00.
- OSRD 4032 PBL 53543 (5-213)  
Pugh, E. M., and Winslow, G. H.  
Ballistic tests on combinations of plastic and steel armor. Aug. 1944.  
7p Mi \$1.00 Ph \$1.00.
- OSRD 4033 PBL 34774 (2-883)  
Beck, John, Jr.  
A study of the effect of radiation on the burning of rocket powder. Aug 1944.  
21p graph, tables. Mi \$1.00 Ph \$2.00.
- OSRD 4034 PBL 13296 (I-900)  
Conrad, Herbert S.  
Characteristics and uses of item-analysis data. Aug 1944.  
82p Mi \$1.00 Ph \$6.00.
- OSRD 4040 PBL 23709 (2-544)  
Princeton University. Statistical Research Group  
Statistical analysis for a new procedure in sensitivity experiments. Jul. 1944.  
63p graphs. Mi \$1.00 Ph \$5.00.
- OSRD 4042 PBL 19489 (I-1253)  
Thomsen, Erich G., and others  
Formability of magnesium alloy sheet (NA-146): Final report, Part VI, Forming beads on the Guerin press, Jul 1, 1944. Aug 1944.  
38p photos, graphs. Mi \$.50 Ph \$3.00.
- OSRD 4043 PBL 20204 (I-1500)  
Duwez, P. E., and others  
Behavior of metals under dynamic conditions (NS-109): The behavior of clamped beams under impact loading. Progress report, Jul 4, 1944. Aug 1944.  
27p photos, diagrs, graphs. Mi \$.50 Ph \$2.00.
- OSRD 4044 PBL 5501 (I-1141)  
Bakelite Corp., Research and Development Dept.  
Coatings for wood ship bottoms. Aug 1944.  
8p Mi \$.50 Ph \$1.00.
- OSRD 4045 PBL 32697 (3-293)  
National Defense Research Commission. Applied Mathematics Panel  
Notes on parameters of probability distributions. Jun 1944.  
20p Mi \$1.00 Ph \$2.00.
- OSRD 4047 PBL 28591 (2-440)  
Carnegie Institution of Washington. Mount Wilson Observatory  
Resolving power in aerial photography. May 1944.  
42p curves, photos, tables. Mi \$1.00 Ph \$3.00.
- OSRD 4048 PBL 16452 (I-1205)  
Hutchinson, W. G., and McCrea, Robert  
Report on a house for the study of materials under tropical conditions. Jul 1944.  
15p drawings, photos. Mi \$.50 Ph \$1.00.
- OSRD 4050 PBL 18332 (I-1209)  
Imus, H. A.  
Manual for use in the selection of fire controlmen (O). (Stereoscopic rangefinder operators.) Aug 1944.  
10p photo, diagrs. Mi \$.50 Ph \$7.00.
- OSRD 4052 PBL 19558 (I-1408)  
Low, John R., Jr., and Prater, T. A.  
Plastic flow of aluminum aircraft sheet under combined loads, II: (Na-150): Progress report, Feb, 1943-Jun 1944. 1943-44.  
Drawings, curves, tables, charts.  
PS OSRD Mi Ph  
19565 1496 \$.50 \$4.00  
19559 1938 .50 2.00  
19554 3108 .50 3.00  
19562 3539 .50 2.00  
19558 4052 1.00 5.00 (Final report)
- OSRD 4056 PBL 16470 (I-1247)  
Butts, Allison, and others  
Investigation of the effects of impurities on the ferro-magnetism of nonferrous alloys (OD-156): Progress report, Apr 15-Jul 15, 1944. Aug 1944.  
77p tables, graphs. Mi \$1.00 Ph \$5.00.
- OSRD 4057 PBL 15128 (I-1261)  
Murray, F. J., and Sard, A.  
The prediction of fuze setting. Aug 1944.  
83p tables. Mi \$1.00 Ph \$6.00.
- OSRD 4059 PBL 12172 (I-903)  
Kurtz, Albert K.  
The prediction of code learning ability. Aug 1944.  
67p Mi \$1.00 Ph \$5.00.
- OSRD 4060 PBL 40540 (3-415)  
Mikhailov, G. S., and Humberstone, J. H.  
Suggested specification for ferritic arc-welding electrode, type NRC-2A. Advisory report. Aug 1944.  
18p photos, diagrs. Mi \$1.00 Ph \$2.00.
- OSRD 4062 PBL 22520 (I-1574)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77): A metallurgical examination of four Japanese 47 mm. armor-piercing, high-explosive shells. Progress report 89, Jul 18, 1944. Aug 1944.  
17p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 4063 PBL 22521 (I-1526)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of parts from a Japanese Sakae 12 engine. Progress report 90, Jul 18, 1944. Aug 1944.  
40p photos, diagrs. Mi \$.50 Ph \$3.00.
- OSRD 4064 PBL 22520 (I-1574)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77): A metallurgical examination of a Japanese 20 mm. aircraft machine gun. Progress report 94, Jul 24, 1944. Aug 1944.  
11p photos. Mi \$.50 Ph \$1.00.
- OSRD 4065 PBL 32227 (2-659)  
Gerry, Eugene B.  
Test for determining incendiary values of bombs and bomb fuels. Report, May 26, 1944. Aug 1944.  
56p photos, tables, drawings. Mi \$2.00 Ph \$4.00.
- OSRD 4057 PBL 32228 (2-548)  
Messing, Richard  
The inflammability of wood as effected by moisture content. Second report, May 25, 1944. Aug 1944.  
31p tables, graphs, charts. Mi \$1.00 Ph \$3.00.
- OSRD 4068 PBL 4648 (I-320)  
Ortynsky, R. L., and others  
Comparison of M12 and M13 bursters in the M47-A2, 100 lb. incendiary bomb. 1944.  
29p illus. Ph \$2.00 Mi \$.50.
- OSRD 4070 PBL 19548 (I-1407)  
Barrett, Charles S., and others  
Deformation characteristics of magnesium alloys (Na-148): Fourth quarterly progress report Mar 15, 1944-Jun 15, 1944. Aug 1944.  
46p diagr, photos. Mi \$.50 Ph \$4.00.
- OSRD 4071 PBL 22522 (I-1574)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of a Japanese amy 105 mm. M. E. shell of 1938. Progress report 96, Jul 25, 1944. Aug 1944.  
10p photos, tables. Mi \$.50 Ph \$1.00.
- OSRD 4072 PBL 22523 (I-1525)  
Jackson, L. R., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of a German air-speed indicator. Progress report 97, Jul 24, 1944. Aug 1944.  
10p photos. Mi \$.50 Ph \$1.00.
- OSRD 4073 PBL 22524 (2-63)  
Reichelderfer, C. A., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of landing gear strut, landing wheel, and tail wheel strut assembly from Japanese aircraft "Betty." Progress report 92, Jul 24, 1944. Aug 1944.  
34p photos. Mi \$.50 Ph \$3.00.
- OSRD 4074 PBL 34758 (3-267)  
Newton, R. R., and Rosser, J. B.  
Preliminary report on the motion of a fin-stabilized rocket during the buring period part II. Aug 1944.  
14p diagrs. Mi \$1.00 Ph \$1.00.  
See also PB 34757.
- OSRD 4079 PBL 31014 (2-990)  
Langmuir, I., and others  
A study of binaural perception of the direction of a sound source. Jun 1944.  
56p diagr, graphs, photos, tables. Mi \$2.00 Ph \$4.00.
- OSRD 4080 PBL 28552 (2-303)  
Brantley, L. Reed  
Studies and investigations in connection with the development of hard protective coatings for optical plastics. Aug 1944.  
13p tables, diagrs. Mi \$1.00 Ph \$1.00.

- OSRD 4082 PBL 12173 (I-769)  
Seashore, Harold, and others  
Variation of activities in code classes: An experimental study of the problem of monotony in code learning. Aug 1944.  
31p. MI \$.50 Ph \$3.00.
- OSRD 4083 PBL 12175 (I-982)  
Seashore, Harold, and Stuntz, Stephen  
Variety in code learning: A manual of activities designed to increase interest and reduce monotony in code schools. Aug 1944.  
49p. MI \$.50 Ph \$4.00.
- OSRD 4086 PBL 15869 (I-1421)  
Mehl, R. F., and others  
Prevention of cracking in gun tubes (00-34-3). Progress reports, Jun 15, Sep 15, 1944, Jan 15, 1945; final report, Jun 30, 1945. Sep 1944-Jul 1945.  
Diags, photos, tables.  
PB OSRD Pages Micro Photo  
15869 4086 68p \$1.00 \$5.00  
15830 4567 33p .50 3.00  
15852 4938 26p .50 2.00  
15831 5383 31p .50 3.00
- OSRD 4087 PBL 15810 (I-981)  
Prentice, W.C.H.  
The selection and training of night look-outs. Report No. 2. A study of the performance of night lookouts aboard ship. Oct 1944.  
39p.  
MI \$.50 Ph \$3.00.
- OSRD 4089 PBL 22525 (2-131)  
Granell, L.H., and others  
Examination of enemy materiel (00-113) (AC-77): A metallurgical examination of Japanese 75 mm. armor-piercing, high-explosive Howitzer rounds. Aug 1944.  
26p tables. MI \$.50 Ph \$2.00.
- OSRD 4090 PBL 22526 (2-64)  
Jackson, L.R., and others  
Examination of enemy materiel (00-113) (AC-77): Metallurgical examination of a German aircraft master compass and a pilot (repeater) compass. Progress report 95, Jul 25, 1944. Aug 1944.  
30p photos. MI \$.50 Ph \$2.00.
- OSRD 4093 PBL 19650 (I-1443)  
Greenber, H. J., and Hurewicz, N.  
The stability of periodic dynamical processes subject to discontinuous impulses. Aug 1944.  
75p table. MI \$1.00 Ph \$5.00.
- OSRD 4101 PBL 12034 (I-992)  
Makman, Selman A., and others  
Fungi and tropical deterioration, a manual. Third edition. Jul 1944.  
47p. MI \$.50 Ph \$4.00.
- OSRD 4102 PBL 20212 (I-1576)  
Boston, G.W., and others  
Investigation of boron in armor plate (OD-87): Machinability evaluation by cutting-speed tool-life tests of three steels, each in three annealed structures. Progress report, Aug 10, 1944. Sept 1944.  
22p curves, diagrs, tables.  
MI \$.50 Ph \$2.00.
- OSRD 4111 PBL 8338 (I-637)  
Perley, G.A., and Cherry, R.H.
- Development of a direct-indicating carbon monoxide instrument. 1944.  
72p. MI \$1.00 Ph \$5.00.
- OSRD 4113 PBL 22527 (2-64)  
Jackson, L.R., and others  
Examination of enemy materiel (00-113) (AC-77): Metallurgical examination of a German and Japanese altimeter. Progress report 98, Jul 21, 1944. Sept 1944.  
17p photos. MI \$.50 Ph \$2.00.
- OSRD 4114 PBL 28583 (2-358)  
Dunbar, Theodore, Jr.  
Binocular developments. Final report. Dec. 1944.  
40p drawings, graphs, photos.  
MI \$1.00 Ph \$3.00.
- OSRD 4116 PBL 33249 (3-126)  
White, Harvey E.  
Invisible ultraviolet light sources and filters, Gallium lamp. Second progress report. Jul 1944.  
9p curve, photos. MI \$1.00 Ph \$1.00.
- OSRD 4118 PBL 16451 (I-1200)  
Pennsylvania University, The Johnson Foundation.  
Report on the fungus fouling of optical instruments. Sep 1944.  
90p tables, photos. MI \$1.00 Ph \$6.00.
- OSRD 4119 PBL 28550 (2-304)  
Lucas, H. J.  
Studies and investigations in connection with the development of hard protective coatings for optical plastics and glass. Progress reports: monthly, bimonthly and final reports. Mar 1943-Nov 1944.  
Tables, graphs, photos.  
PB OSRD P MI Ph  
28544 1355 20 \$1.00 \$2.00  
28545 1483 26 1.00 2.00  
28546 1575 27 1.00 2.00  
28547 1710 9 1.00 1.00  
28548 1849 28 1.00 2.00  
28549 1956 54 2.00 4.00  
28550 4119 78 2.00 6.00
- OSRD 4122 PBL 15827 (I-1409)  
Mehl, R.F., and others  
Improvement in gun steel ingot practices (00-34-3); Part I. Statistical and laboratory studies. Final report, Jul 15, 1944. Aug 1944.  
62p diagrs, graphs, photos.  
MI \$1.00 Ph \$5.00.
- OSRD 4123 PBL 18061 (I-1582)  
Williams, J.W., and others  
The characterization and solubility of fractionated wood pulp and cotton linters nitro-cellulose, to Mar 1, 1944. Sep 1944.  
45p graphs, tables. MI \$.50 Ph \$3.00.
- OSRD 4124 PBL 12180 (I-903)  
Kurtz, Albert K., and Seashore, Harold  
The radio code research project: Final report of Project N-107. Sep 1944.  
9p. MI \$.50 Ph \$1.00.
- OSRD 4125 PBL 22528 (2-67)  
Granell, L.H., and others  
Examination of enemy materiel (00-113) (AC-77): Metallurgical examination of four different types of Japanese aircraft spark plugs. Progress report 99, Aug 5, 1944. Sep 1944.  
8p photos, tables.  
MI \$.50 Ph \$1.00.
- OSRD 4126 PBL 22529 (I-1567)  
Anthony, H.L.  
Examination of enemy materiel (00-113) (AC-77): Metallurgical examination of captured enemy pressure vessels. Progress report 110, Aug 14, 1944. Sep 1944.  
21p photos, tables. MI \$.50 Ph \$2.00.
- OSRD 4127 PBL 22530 (2-64)  
Jackson, L.R., and others  
Examination of enemy materiel (00-113) (AC-77): Metallurgical examination of two Japanese aircraft bank and turn indicators. Progress report 109, Aug 10, 1944. Sep 1944.  
27p photos. MI \$.50 Ph \$2.00.
- OSRD 4131 PBL 22531 (I-1575)  
Granell, L.H., and others  
Examination of enemy materiel (00-113) (AC-77): Metallurgical examination of two Japanese 140 mm. naval projectiles. Progress report 114, Aug 16, 1944. Sep 1944.  
14p photos, tables. MI \$.50 Ph \$1.00.
- OSRD 4134 PBL 18957 (I-1531)  
Blomquist, Alfred T.  
Certain aliphatic nitramines and related compounds. Nov 1944.  
168p. MI \$2.00 Ph \$12.00.
- OSRD 4135 PBL 22532 (I-1568)  
Bartholomew, E.L., Jr., and others  
Examination of enemy materiel (00-113) (AC-77): Metallurgical investigation of two 50 mm. German tank gun tubes, breech rings, and breech ring locking collars. Progress report 100, Aug 15, 1944. Sep 1944.  
42p curves, diagrs, photos, tables.  
MI \$.50 Ph \$3.00.
- OSRD 4136 PBL 31057 (2-949)  
Jones, Reginald L.  
Wide range supersonic projector for calibration work. Aug 1944.  
23p diagrs, graphs, photo. MI \$1.00 Ph \$2.00.
- OSRD 4138 PBL 15828 (I-1361)  
Wells, Cyril, and Mehl, R. F.  
Improvement in wrought gun tubes (00-34-3); Quarterly report, Apr 15-Jul 15, 1944. Sep 1944.  
12p. MI \$.50 Ph \$2.00.
- OSRD 4139 PBL 58181 (I-947)  
Friend, A. M.  
Discussion of the radio link receiver problem and descriptions of low I.F. crystal controlled superheterodyne receivers for Azon and Razor. Report of developments to July 15, 1944. Jul 1944.  
75p photos, diagrs, graphs, tables.  
MI \$2.00 Ph \$5.00.  
See also PB 58235.
- OSRD 4140 See OSRD 4404.
- OSRD 4141 PBL 8612 (I-830)  
Giauque, W. F.  
Liquid oxygen trailer unit. Final report to July 25, 1944. 1944.  
705p illus. MI \$7.50 Ph \$47.00.
- OSRD 4142 See OSRD 3523.
- OSRD 4143 PBL 8340 (I-607)  
Trumpler, P.R.  
Heat transfer and pressure drop in Collins exchangers. 1944.  
44p illus. MI \$.50 Ph \$3.00.

# Bibliography

45

- OSRD 4144 See OSRD 4404.
- OSRD 4145 PBL 22533 (2-64)  
DeVore, J. R.  
Examination of enemy materiel (OD-113) (AC-77): Luminescence of enemy aircraft instrument dials. Progress report III, Aug 16, 1944. Sep 1944.  
14p photos, tables. Mi \$.50 Ph \$1.00
- OSRD 4150 See OSRD 3607.
- OSRD 4151 PBL 12174 (I-903)  
Levin, Max H.  
An analysis of men entering the DD Pool, Precommissioning Training Center, Treasure Island, May 29-July 29, 1944. Sep 1944.  
14p Mi \$.50 Ph \$1.00.
- OSRD 4157 PBL 32215 (2-742)  
Adler, Howard, and Klein, George  
Pilot plant study of the processing of plasticized white phosphorus. Final report, Jul 29, 1944. Sep 1944.  
36p diagr, graphs, photos. Mi \$1.00 Ph \$3.00.
- OSRD 4158 PBA 6024 (I-534)  
Yoe, John H., and Lindsley, Charles H.  
Gravimetric determination of water, trimer and residue in cyanogen chloride. 1944.  
18p Mi \$.50 Ph \$2.00.
- OSRD 4161 PBA 40636 (3-550)  
Calvin, Melvin  
The development, properties, and use of chelate compounds for the production of oxygen. Final summary report, Aug 31, 1944. Sep 1944.  
27p Mi \$1.00 Ph \$2.00.
- OSRD 4162 PBL 27424 (2-544)  
Peck, R. B., and Speer, T. L.  
Soil conditions at the site of underground explosion tests Camp Gruber, Oklahoma, and Princeton, New Jersey. Sep 1944.  
34p drawings, tables. Mi \$1.00 Ph \$3.00.
- OSRD 4167 PBL 6569 (I-689)  
National Defense Research Commission  
Manual on the operation and maintenance of the mobile servicing unit for flame throwers. 1944.  
83p Ph \$6.00 Mi \$1.00.
- OSRD 4169 PBL 33344 (2-746)  
Abbot, C. G., and Aldrich, L. B.  
A special radiation filter opaque to the eye, transmissive for waves shorter than 3000 angstroms. Progress report. 1944.  
19p drawings, tables. Mi \$1.00 Ph \$2.00.
- OSRD 4170 PBL 33347 (2-864)  
Leverenz, H. W.  
Research on high intensity phosphor light source. Final report, Mar 1943-Aug 1944. Jul 1944.  
51p photo, graphs, diagrs. Mi \$2.00 Ph \$4.00.  
See also PB 33342.
- OSRD 4171 PBL 19498 (I-1248)  
Finch, D. M., and others  
Formability of magnesium alloy sheet (MA-146): Final report, Part VII, Stretch forming magnesium alloys, Aug 5, 1944. Sep 1944.  
118p photos, diagrs, curves. Mi \$.50 Ph \$8.00.
- OSRD 4172 Cunningham, D. M., and others  
Stress-strain relationships for J1 magnesium alloy extrusion under biaxial stresses. Sep 1944.  
30p curves, drawings, photos. Mi \$.50 Ph \$2.00.
- OSRD 4175 Hurd, Charles D.  
2-chlorovinylselenium chloride, selenium oxychloride, 2-chloroetheneseleninyl chloride, and ethaneseleninyl chloride hydrate, to September, 1944. 1944.  
12p Mi \$.50 Ph \$1.00.
- OSRD 4177 Fuson, R. C., and others  
The composition of Levinstein mustard. 1944.  
138p Mi \$1.50 Ph \$10.00.
- OSRD 4178 Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of a Japanese aircraft 12.7 mm. "Browning" machine gun. Progress report II2, Aug 16, 1944. Sep 1944.  
22p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 4179 Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of airframe sections from "Zeke," "Val," "Lily," and "Dinah" Japanese planes. Progress report II3, Aug 10, 1944. Sep 1944.  
16p drawings, photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 4180 Chollar, R. G., and others  
Examination of enemy materiel (OD-113) (AC-77): Examination of diaphragm and gasket from Japanese aircraft fuel pump. Sep 1944.  
7p tab, graphs. Mi \$.50 Ph \$1.00.
- OSRD 4183 Technicolor Motion Picture Corp.  
Anti-oscillation mount for binoculars. Feb 1945.  
95p photos, drawings, graphs. Mi \$2.00 Ph \$7.00.
- OSRD 4184 Technicolor Motion Picture Corp.  
Aerial camera shutter. Final report. Feb 1945.  
60p photos, drawing. Mi \$2.00 Ph \$4.00.
- OSRD 4185 Technicolor Motion Picture Corp.  
A method for checking the focus of aerial cameras. Final report. Feb 1945.  
17p photos, curves, drawing. Mi \$1.00 Ph \$2.00.
- OSRD 4186 Columbia University. Airborne Instruments Laboratory  
Handbook of instructions for AN-36/ASQ Sep 1944.  
18p photos, diagr. Mi \$1.00 Ph \$2.00.
- OSRD 4187 Tolles, W. E., and Vacquier, V. V.  
Compensation of magnetic fields in MAD-equipped aircraft. Jul 1944.  
PBL 27551 (2-110)
- 87p photo, drawings, graphs. Mi \$2.00 Ph \$6.00.  
See also PB 27542 and 27548.
- OSRD 4188 PBL 19577 (I-1411)  
Sachs, George, and others  
Correlation of information available on the fabrication of aluminum alloys (MA-126): Final report. Section IV, Survey of the properties of new aluminum alloys: Part V, The aluminum alloy 75S-sheet. Sep 1944.  
81p tables. Mi \$1.00 Ph \$8.00.
- OSRD 4192 White, Merlin P.  
The limit design of structures subjected to impulsive loads—with application to military structures. Sep 1944.  
40p diagrs, tables, graphs. Mi \$.50 Ph \$3.00.
- OSRD 4193 Buswell, A. H.  
The chemistry of certain arsenical chemical warfare agents as water contaminants. 1944.  
48p Mi \$.50 Ph \$4.00.
- OSRD 4195 Hurd, Charles D.  
2-chlorovinylselenium chloride, selenium oxychloride, 2-chloroetheneseleninyl chloride, and ethaneseleninyl chloride hydrate, to September, 1944.  
12p Mi \$.50 Ph \$1.00.
- OSRD 4194 Moller, C. R., and Kaplan, L.  
The preparation for toxicity tests of some heterocycles containing a nitrogen atom common to two fused rings, to August 1, 1944.  
44p Mi \$.50 Ph \$3.00.
- OSRD 4195 Moller, C. R., and Kaplan, L.  
The synthesis of certain mustard analogs, to August 1, 1944. 1944.  
11p Mi \$.50 Ph \$1.00.
- OSRD 4196 Grinstead, C. E.  
Development and tests of an inductor compass. A progress report, December 1943-May 1944. Aug 1944.  
58p photos, diagrs, maps. Mi \$1.00 Ph \$4.00.
- OSRD 4197 Caywood, W.  
Model study of the Rotaflail: Second report. Nov. 1944.  
38p illus. Mi \$.50 Ph \$3.00.
- OSRD 4198 Stitt, J. R.  
Stress relief of weldments for machining stability (OD-34-4): Part II. Final report, Jul 15, 1944. Sep 1944.  
30p tables, graphs, photos. Mi \$1.00 Ph \$2.00.
- OSRD 4200 Kirkwood, John G., and Richardson, John M.  
The plastic deformation of circular diaphragms under dynamic loading by an underwater explosive wave. Progress report. Sep 1944.  
107p curves, tables. Mi \$3.00 Ph \$8.00.

## Bibliography

OSRD 4202 PBA 40634 (3-703)  
 Kirkpatrick, E. C.  
 Synthetic polymers as gasoline thickening agents. Final report, Jun 7, 1944. Oct 1944.  
 121p diagrs, tables, graphs. MI \$3.00  
 Ph \$9.00.

OSRD 4203 PBL 58193 (4-884)  
 Gulf Research & Development Co., Pittsburgh  
 Experimental investigations in connection with high-angle dirigible bombs: Calculated AZON trajectories. 1944.  
 94p tables, graphs. MI \$2.00 Ph \$7.00.

OSRD 4204 PBL 58227 (4-950)  
 Gulf Research & Development Co., Pittsburgh  
 Experimental investigations in connection with high-angle dirigible bombs: The YB-2 bomb (2,000 pound AZON). Progress report, Jun 1, 1944. Jun 1944.  
 46p photos, diagrs, graphs. MI \$1.00  
 Ph \$3.00.

OSRD 4205 PBA 4631 (1-700)  
 McBain, James W., and others  
 Fundamental studies on aluminum scaps. (Progress reports to National Defense Research Commission.) Nov 15, 1943 to May 15, 1945.  
 1943-45.

PB	P	MI	Ph
4631	15	\$0.50	\$1.00
5278	24	.50	2.00
5279	15	.50	1.00
5280	32	.50	3.00
5281	12	.50	1.00
5282	29	.50	2.00
5283	8	.50	1.00
5284	11	.50	1.00
5885	244	2.50	17.00
5886	41	.50	3.00
5886	80	1.00	6.00
5888	57	1.00	4.00
5889	175	2.00	12.00
5961	19	.50	2.00
5965	42	.50	3.00
5957	50	.50	4.00
5971	46	.50	4.00

OSRD 4205 Supp. PBA 4631a (5-87)  
 McBain, J. W., and others  
 Fundamental studies on aluminum scaps. October 15 to November 15, 1943. Nov 1943.  
 10p graphs, diagrs. MI \$1.00 Ph \$1.00.

OSRD 4206 PBL 8900 (1-606)  
 Lobo, W. E., M. W. Kellogg Company  
 Technical data pertaining to air; its liquefaction and distillation, to August 24, 1944.  
 55p MI \$1.00 Ph \$4.00.

OSRD 4207 See OSRD 3523.

OSRD 4208 PBL 16484 (1-1027)  
 Tucker, Clyde W., and others  
 Residual stresses in cold-drawn nonferrous alloys (00-25): An X-ray study, Final report, Part III: Mar 1-Jun 15, 1944. Oct 1944.  
 123p graphs. MI \$1.50 Ph \$9.00.

OSRD 4210 PBL 5219 (1-483)  
 Almy, G. M., and others  
 Three to twenty million volt radiography. Progress report. Section 1. Development of the betatrons. Section 2. Development of porcelain envelope for vacuum tubes. 1944.  
 23p illus. Ph \$2.00 MI \$.50.

OSRD 4211 PBA 8022 (1-481)  
 Salzberg, P. L., and others  
 Addition of surface active agents to mustard. 1944.  
 16p Ph \$2.00 MI \$.50.

OSRD 4214 PBL 22537 (2-34)  
 Grenell, L. H., and others  
 Examination of enemy material (00-113) (AC-77): Metallurgical examination of two German MG-151 aircraft machine gun mounts. Progress report 118, Aug 25, 1944. Oct 1944.  
 13p photos, tables. MI \$.50 Ph \$1.00.

OSRD 4215 PBL 22538 (2-23)  
 Grenell, L. H., and others  
 Examination of enemy material (00-113) (AC-77): Metallurgical examination of a Japanese "Zeke" aircraft volt box. Progress report 118, Aug 31, 1944. Oct 1944.  
 9p photos, tables. MI \$.50 Ph \$1.00.

OSRD 4217 PBL 19775 (2-16)  
 Licklider, J. C. R.  
 The effects of amplitude distortion upon the intelligibility of speech. Nov 1944.  
 78p diagrs. MI \$1.00 Ph \$6.00.

OSRD 4218 PBL 5901 (3-98)  
 Redemann, C. Ernst, and others  
 An electronic interval timer for the Northrop titrimeter. Progress report, Sep 15, 1944. Oct 1944.  
 16p photos, diagrs, graphs. MI \$.50 Ph \$2.00.

OSRD 4219 PBL 13110 (1-922)  
 Schilling, H. K.  
 Preliminary report on supersonic signalling. Sep 1944.  
 17p MI \$.50 Ph \$2.00.

OSRD 4222 PBL 43045 (3-789)  
 Bottler, T. L.  
 General block improvements. Final report. Apr 1944.  
 20p diagrs. MI \$1.00 Ph \$2.00.

OSRD 4224 PBL 25402 (2-230)  
 U. S. Office of Scientific Research and Development  
 Final report of the 1/4 ton 4x4 amphibian built by Marmon Herrington. Sep 1944.  
 10p drawing, photos. MI \$1.00 Ph \$1.00.

OSRD 4225 PBL 15601 (1-1227)  
 Wells, H. W., and others  
 Correlation of direction-finder errors with ionospheric conditions, College, Alaska, August 16, 1943, to June 30, 1944. Sep 1944.  
 16p MI \$.50 Ph \$2.00.

OSRD 4233 PBL 18333 (1-1403)  
 Imau, H. A.  
 Manual for the installation and adjustment of the multiple projection Elkonometer. Oct 1944.  
 71p photos, drawings. MI \$1.00 Ph \$6.00.

OSRD 4234 PBL 22821 (1-1581)  
 Grenell, L. H., and others  
 Examination of enemy material (00-113) (AC-77): Metallurgical examination of a Japanese Sakae-21 aircraft engine. Progress report 107, Aug 8, 1944. Oct 1944.  
 110p photos, tables. MI \$1.50 Ph \$8.00.

OSRD 4235 PBL 20211 (2-37)  
 Jackson, L. R., and others

Investigation of boron in armor plate (00-87): Endurance properties of basic open hearth steel containing 0.4 percent carbon and 1.6 percent manganese without and with boron addition. Progress report, Aug 15, 1944. Oct 1944.  
 30p curves. MI \$.50 Ph \$2.00.

OSRD 4237 PBL 24879 (2-259)  
 Razek, Joseph  
 Investigation of a method of nonmagnetic mine detection based on the well-logger. Oct 1944.  
 21p photos. MI \$.50 Ph \$2.00.

OSRD 4238 PBL 24878 (2-259)  
 Razek, Joseph  
 Report on Mine detection method proposed by Virgil Brittain. Final report. Oct 1944.  
 8p photos, diagr. MI \$.50 Ph \$1.00.

OSRD 4239 PBL 13114 (1-806)  
 Barry, J. M.  
 Tests of odograph in a 2 1/2-ton amphibious truck.  
 11p illus. MI \$.50 Ph \$1.00.

OSRD 42428 PBL 13295 (1-904)  
 Peterson, D. A.  
 The preparation of norms for the fleet edition of the general classification test. Oct 1944.  
 17p MI \$.50 Ph \$2.00.

OSRD 4245 PBL 20833 (1-1546)  
 Dietze, E.  
 Measurement of projector and hydrophone performance, definitions and terms. Sep 1944.  
 62p diagrs, graphs. MI \$1.00 Ph \$6.00.

OSRD 4249 PBL 5504 (1-409)  
 Ericson, N. L., and Baranek, L. L.  
 Noise reduction in LVT-A-4 amphibious tractors. 1944.  
 61p illus. Ph \$5.00 MI \$1.00.

OSRD 4251 PBL 22539 (1-1568)  
 Bartholomew, E. L., Jr., and others  
 Examination of enemy material (00-113) (AC-77): Metallurgical investigation of German 105 mm. gun tube. Progress report 101, Sep 15, 1944. Oct 1944.  
 17p diagrs, photos, tables. MI \$.50 Ph \$2.00.

OSRD 4252 PBL 22540 (1-1522)  
 Heusener, C. E., and others  
 Examination of enemy material (00-113) (AC-77): Metallurgical examination of airframe sections from Japanese aircraft "Jill." Progress report 123, Sep 12, 1944. Oct 1944.  
 13p photos. MI \$.50 Ph \$1.00.

OSRD 4253 PBL 16490 (1-1246)  
 Anderson, E. A., and Pearce, W. M.  
 Prevention of stress-corrosion cracking of cartridge brass by protective coatings or surface treatment (00-25): Final report, supp. Oct 1944.  
 5p MI \$.50 Ph \$1.00.

OSRD 4256 PBL 18877 (2-35)  
 Bridgeman, P. W.  
 The plastic properties of steel under large strains and high stresses. Final report. Oct 1944.  
 74p graphs, tables. MI \$1.00 Ph \$5.00.

## Bibliography

47

- OSRD 4260 PBL 12177 (I-84C)  
Talley, C. Morton, and others  
Report on microphone position; T-30-3 and T-17 Oct 1944.  
15p Mi \$.50 Ph \$1.00.
- OSRD 4261 PBL 12178 (I-900)  
Curtis, James F.  
Report on training studies in voice communication. II. The use of noise in a training program. Oct 1944.  
20p Mi \$.50 Ph \$2.00.
- OSRD 4263 PBL 4024 (I-446)  
Viteles, Morris S., and others  
An investigation of the range estimation trainer, device SC-4 as a method of teaching range estimation. 1944.  
55p Ph \$4.00 Mi \$1.00.
- OSRD 4264 PBL 18360 (I-1270)  
Lindsay, Donald B., and others  
The effect of extraneous illumination upon detection of signals on an A-Scan oscilloscope. Oct 1944.  
14p tables. Mi \$.50 Ph \$1.00.
- OSRD 4266 PBL 23779 (2-456)  
New York University. Applied Mathematics Group  
Supersonic flow and shock waves, a manual on the mathematical theory of non-linear wave motion. Aug 1944.  
284p graphs, drawings. Mi \$3.00 Ph \$20.00.  
For suppl. see PB 23728.
- OSRD 4267 PBL 22541 (I-1573)  
Anthony, H. L.  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of Japanese oxygen and carbon dioxide cylinders. Progress report I17, Sep 9, 1944. Oct 1944.  
25p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 4269 PBL 22891 (2-420)  
McClure, F. A.  
Western Hemisphere bamboos as substitutes for oriental bamboos for the manufacture of ski pole shafts. Final report, Apr 15, 1943-May 31, 1944. May 1944.  
184p photos, tables. Mi \$2.00 Ph \$11.00.
- OSRD 4270 PBL 20832 (I-1327)  
Floyd, L. L.  
The use of the Henrici Harmonic Analyzer to obtain frequency spectra of plumes. Sep 1944.  
8p Mi \$.50 Ph \$1.00.
- OSRD 4272 PBA 5486 (I-431)  
Osterhout, W. J. V.  
The toxic action of mustard on *Mitella*. 1942.  
15p illus. Ph \$1.00 Mi \$.50.
- OSRD 4277 PBL 28696 (2-528)  
Harvard University, Optical Research Lab.  
Report on a mirror frame method for harmonizing B-29 guns and sight. Dec. 1945.  
35p photos, diagrs, sketches, tables.  
Mi \$1.00 Ph \$3.00.
- OSRD 4279 PBL 22542 (2-68)  
Smith, E. M., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of oil cooler from Japanese aircraft "Betty." Progress report I20, Aug 31, 1944. Oct 1944.  
9p photos. Mi \$.50 Ph \$1.00.
- OSRD 4280 PBL 22358 (I-1519)  
Smither (V. L.) Laboratories  
Examination of enemy materiel (OD-113) (AC-77): Examination of Japanese aircraft tires and tube. Progress report I24, Sep 14, 1944. Oct 1944.  
14p drawings, photos. Mi \$.50 Ph \$1.00.
- OSRD 4281 PBL 22369 (2-28)  
Jackson, L. R., and others  
Examination of enemy material (OD-113) (AC-77). Metallurgical examination of a German and a Japanese aircraft rate of climb indicator. Progress report I25, Sep 15, 1944. Oct 1944.  
20p photos, tables.  
Mi \$.50 Ph \$2.00.
- OSRD 4282 PBL 19519 (2-37)  
Jackson, L. R., and others  
Fatigue properties of magnesium alloys and structures: Fatigue properties of magnesium alloy sheet—Part III (NA-145). Final Report, Aug 31, 1944. Oct 1944.  
59p photos, curves. Mi \$1.00 Ph \$4.00.
- OSRD 4290 PBL 12178 (I-770)  
Talley, C. Horton, and others  
Report on Voice loudness: Over aircraft radios and microphones. Oct 1944.  
12p illus. Mi \$.50 Ph \$1.00.
- OSRD 4292 PBL 31058 (2-874)  
Martin, W. H.  
A calibration system in the lower megacycle range. Aug 1944.  
77p photos, diagrs, graphs.  
Mi \$2.00 Ph \$6.00.
- OSRD 4294 PBL 19781 (I-1421)  
Queresu, J. F.  
Pilot model—seacoast data transmission system. Final report. Oct 1944.  
27p photos, sketches. Mi \$.50 Ph \$2.00.
- OSRD 4295 PBL 58233 (4-1063)  
Jackson, Alfred E.  
Tests of television equipped high angle bombs at Tonopah, Nev., April-May, 1944.  
23p photos. Mi \$1.00 Ph \$2.00.
- OSRD 4297 PBL 43062 (3-793)  
Wade, Edward, and Townsend, C. L.  
Improvements to block equipment television transmitter and receiver for rapid frequency change under NDRC contract OEM-441 (as amended). Final report, n.d.  
27p diagrs, drawings. Mi \$1.00 Ph \$2.00.
- OSRD 4302 See OSRD 3623.
- OSRD 4303 PBA 5956 (I-409)  
Coleman, George H., and others  
The preparation and stability of nitrogen mustards and related compounds, to September 10, 1944. 1944.  
12p Mi \$.50 Ph \$1.00.
- OSRD 4304 PBA 5933 (I-477)  
Fusion, R. C., and others  
A continuous process for the preparation of mustard and sesquimustard. 1944.  
12p Ph \$1.00 Mi \$.50.
- OSRD 4306 PBA 5859 (I-477)  
Fusion, R. C., and others  
Structure of propyl mustard and its analogs. 1944.  
21p Ph \$2.00 Mi \$.50.
- OSRD 4308 PBA 5915 (I-513)  
Northrop, John H.  
Apparatus for the automatic detection of H or other gases which react with bromine by means of the bromine electrode, to September 8, 1944. 1944.  
14p illus. Ph \$1.00 Mi \$.50.
- OSRD 4309 PBA 5868 (I-471)  
Mason, G. W., and Delamater, G. B.  
The microscopical identification of chloro-platin, to November 1, 1944. 1944.  
9p Ph \$1.00 Mi \$.50.
- OSRD 4310 PBA 5914 (I-1143)  
Northrop, John H., and Gettemans, J. F.  
Automatic titrator for the determination of H, L and other gases in air: Supplement No. 4: Progress report to Sep. 5, 1944. Oct. 1944.  
6p Mi \$.50 Ph \$1.00.
- OSRD 4311 PBA 5916 (I-533)  
Northrop, John H., and Gettemans, J. F.  
Determination of HS, H-I and other gases in air at a distance from the operator. Supplement No. 2, to September 1, 1944. Determination of HM3 with sodium hydroxide. 1944.  
5p Ph \$1.00 Mi \$.50.
- OSRD 4314 PBL 16735 (I-1312)  
Bourley, G. H.  
Sonar training barge for consubstant: Progress report. Oct 1944.  
9p photos, diagrs. Mi \$.50 Ph \$1.00.
- OSRD 4315 PBL 22370 (I-1525)  
Jackson, L. R., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of a German aircraft course meter. Progress report I06, Sep 22, 1944. Nov 1944.  
12p photos. Mi \$.50 Ph \$1.00.
- OSRD 4316 PBL 22371 (I-1496)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77): Corrosion resistance of a steel piston and a magnesium casting from a Japanese oleo landing strut. Progress report I22, Sep 12, 1944.  
17p photos. Mi \$.50 Ph \$2.00.
- OSRD 4317 PBL 22372 (I-1492)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of six German explosive bomb rack bolts. Progress report I25, Sep 13, 1944. Nov 1944.  
10p photos, drawings. Mi \$.50 Ph \$1.00.
- OSRD 4318 PBL 33361 (2-822)  
Lamb, Reginald T., and McLeod, John H.  
Fluorescent retrodirective autocollimating buttons. Final report, Dec 1, 1943-Aug 31, 1944. Sep 1944.  
12p diagrs. Mi \$1.00 Ph \$1.00.
- OSRD 4319 PBL 51003 (4-973)  
Floyd, F. H.  
Stereoscopic camera with rapid automatic processing. Final report. Feb. 1944.  
35p photos, diagrs. Mi \$1.00 Ph \$3.00.  
See also PB 51002.

## Bibliography

- OSRD 4323 PBL 15809 (I-980)  
Lamier, L. H.  
The selection and training of night lookouts. Report No. 3. A night lookout trainer for use aboard ship. Nov 1944.  
23p Mi \$.50 Ph \$2.00.
- OSRD 4324 PBA 15813 (I-985)  
Heise, G. W., and others  
Zinc chloride activated wood charcoal. (Progress report.) Sep 1944.  
12p tabs. Mi \$.50 Ph \$1.00.
- OSRD 4325 PBM 5934 (I-496)  
Heaton, G., and others  
The preparation for toxicity tests of some thylene and acetylene derivatives, to September 1, 1944. 1944.  
40p Ph \$3.00 Mi \$.50.
- OSRD 4327 PBL 58235 (4-959)  
Tellier, Joseph C.  
Razor link receiver equipment. Final report. Sep 1944.  
26p photos, graphs. Mi \$1.00 Ph \$2.00.  
See also PB 68191.
- OSRD 4329 PBL 12179 (I-786)  
Keller, Fred S., and others  
A comparison of training methods at two levels of code learning. Nov 1944.  
16p Mi \$.50 Ph \$2.00.
- OSRD 4330 PBL 12064 (I-903)  
Keller, Fred and Estes, K. W.  
Distribution of practice in code learning. (Four hours massed versus four hours spaced) Nov 1944.  
7p Mi \$.50 Ph \$1.00.
- OSRD 4332 PBL 15736 (I-1311)  
Gillett, G. D., and Roddelius, M. W.  
Animated trainers: BIAT, RBAT, IS-WAS-AT: Completion report. Oct 1944.  
10p photos. Mi \$.50 Ph \$1.00.
- OSRD 4333 PBL 31021 (2-640)  
Knudsen, V. O., and others  
Survey of underwater sound: Report no. 3. Ambient noise, Sep. 1944.  
236p graphs, maps, tables.  
Mi \$5.00 Ph \$16.00.
- OSRD 4334 PBL 15634 (I-1294)  
Rouse, Hunter, and others  
Wind-tunnel studies of the diffusion of heat by single wind curtains and baffles, to July 10, 1944. Nov 1944.  
21p diagrs. Mi \$.50 Ph \$2.00.  
See also PB 15640.
- OSRD 4335 PBL 5857 (I-532)  
MacDougall, F. H., and others  
Sensitivity of arsenical detector tubes of H-9 kit to L, PD and ED, to November 6, 1944. 1944.  
21p Ph \$2.00 Mi \$.50.
- OSRD 4337 PBL 22397 (I-1496)  
Hoyt, S. L., and others  
Examination of enemy materiel (OD-113 AC-77). Metallurgical examination of six grades of Swedish carbide tool tips. Progress report I29, Oct 5, 1944. Nov 1944.  
12p tables, photos. Mi \$.50 Ph \$1.00.
- OSRD 4340 PBL 9416 (I-606)  
Spector, Norman A.
- The removal of carbon dioxide from atmospheric air. 1944.  
178p illus. Mi \$2.00 Ph \$12.00.
- OSRD 4342 PBL 15811 (I-1043)  
Wedell, C. H.  
Selection and training of night lookouts. Report No. 4. Final report in summary of work on the selection and training of night lookouts. Nov 1944.  
150 Mi \$.50 Ph \$1.00.
- OSRD 4343 PBL 20227 (I-1576)  
Clark, D. S., and others  
Behavior of metals under dynamic conditions (NS-109): Mechanics of the dynamic performance of metals. Progress report, Sep 1, 1944. Nov 1944.  
105p diagrs. Mi \$1.50 Ph \$7.00.
- OSRD 4344 PBL 11'211 (I-839)  
Hathaway, Claude H., and Reno, Herbert  
Development of a special oscillograph for Aberdeen Proving Ground. Final Report. Oct 1944.  
61p illus. Mi \$1.00 Ph \$5.00.
- OSRD 4345 PBL 63837 (5-212)  
Carnegie Institution of Washington, Geophysical Laboratory  
Investigation of gun erosion at the Geophysical Laboratory. Volume III. Jan to Jul 1944. Oct 1944.  
107p tables, graphs. Mi \$3.00 Ph \$7.00.
- OSRD 4347 PBL 19507 (I-1413)  
Taub, J. M., and Sachs, George  
Advisory report on stretching characteristics of aluminum alloy sheet (NA-126). Nov 1944.  
36p photos, tables, diagrs. Mi \$.50 Ph \$3.00.
- OSRD 4348 PBL 19576 (I-1411)  
Sachs, George, and Lubahn, J. D.  
Correlation of information available on the fabrication of aluminum alloys (NA-126): Final report. Section V, Formability of aluminum alloys for use in military aircraft: Part I, General introduction; Part II, Effects of non-uniform stresses and strains. Nov 1944.  
75p graphs. Mi \$1.00 Ph \$5.00.
- OSRD 4352 PBL 18325 (I-1293)  
Beler, D.C., and others  
A follow-up study of the efficiency of the projection eikonometer test in predicting the performance of stereoscopic height finder observers. (Applied Psychology Panel: Selection and training of rangefinder and radar operators. Rep't 13.) Nov 1944.  
14p graphs. Mi \$.50 Ph \$1.00.
- OSRD 4358 PBL 22373 (I-1505)  
Grenell, L.H., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of a German MG-42, 7.92 mm. machine gun. Progress report I19, Sep 7, 1944. Nov 1944.  
12p photos, tables. Mi \$.50 Ph \$1.00.
- OSRD 4359 PBL 22374 (I-1525)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of parts from an Aichi V-12 Japanese aircraft engine. Progress report I21, Sep 9, 1944.  
36p photom. Mi \$.50 Ph \$3.00.
- OSRD 4360 PBL 22375 (I-1582)  
Jackson, L.R., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of German mechanical and electrical aircraft tachometers. Progress report I30, Oct 6, 1944. Nov 1944.  
22p tables, photos. Mi \$.50 Ph \$2.00.
- OSRD 4361 PBL 9417 (I-718)  
Wood, R.E., and Shoemaker, D.P.  
The Pauling oxygen meter, to Jun 30, 1944. Nov 1944.  
135p illus. Mi \$1.50 Ph \$9.00.
- OSRD 4364 PBL 22376 (I-1525)  
Jackson, L.R., and others  
Examination of enemy materiel (OD-113) (AC-77): Metallurgical examination of the instrument panel of a Jumo 211-B direct gasoline injection engine from a Junkers-88 German bomber. Progress report I28, Sep 27, 1944. Nov 1944.  
21p Mi \$.50 Ph \$2.00.
- OSRD 4365 PBL 22377 (I-1507)  
Grenell, L.H., and others  
Examination of enemy materiel (OD-113) (AC-77): Japanese drift meter of bomb sight. Progress report I32, Oct 10, 1944. Nov 1944.  
15p photos. Mi \$.50 Ph \$1.00.
- OSRD 4366 PBL 22378 (I-1575)  
Grenell, L.H., and others  
Examination of enemy materiel (OD-113) (AC-77: M-119): Metallurgical examination of Japanese army 47 mm. H.E. projectiles. Progress report I31, Oct 7, 1944. Nov 1944.  
10p photos, tables. Mi \$.50 Ph \$1.00.
- OSRD 4367 PBL 22379 (I-1526)  
Grenell, L.H., and others  
Examination of enemy materiel (OD-113) (AC-77: M-119): Metallurgical examination of Japanese propeller blades. Progress report I33, Sep 14, 1944. Nov 1944.  
10p Mi \$.50 Ph \$1.00.
- OSRD 4368 PBL 22380 (I-1522)  
Grenell, L.H., and others  
Examination of enemy materiel (OD-113) (AC-77: M-119): Metallurgical examination of three Japanese aircraft landing hooks. Progress report I34, Oct 12, 1944. Nov 1944.  
29p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 4371 PBL 16450 (I-1189)  
Pittsburgh University  
A method for the prevention of mold growth on optical instruments exposed to tropical conditions. Dec 1944.  
18p Mi \$.50 Ph \$2.00.
- OSRD 4374 PBL 4635 (I-321)  
Standard Oil Co., (Indiana) and others  
Reports on investigation of accident to flame thrower under development by Standard Oil Co. (Indiana) and Herz Engineering Co. 1944.  
105p illus. Ph \$7.00 Mi \$.50.
- OSRD 4383 PBL 16739 (I-1322)  
Hess, W.F., and others  
Final report on Evaluation of factors affecting crack sensitivity of welded joints: Part I. The effect of welding variables and restraint upon the stresses produced in arc welded joints: Final report Nov 1944.  
127p diagrs, graphs. Mi \$.50 Ph \$9.00.

## Bibliography

49

- OSRD 4385 PBL 5866 (I-480)  
Pauling, Linus  
Electron diffraction studies on the molecular structure of chemical warfare agents, to June 3, 1944.  
27p illus. Ph \$2.00 MI \$.50.
- OSRD 4386 PBL 16756 (I-1027)  
Weinman, E. W., and Boeghold, A. L.  
Heat treatment of national emergency steels for use in tanks, combat cars, gun mounts and other ordnance materiel (OD-115). Final report, Aug 31, 1944. Nov 1944.  
50p tables, graphs. MI \$.100 Ph \$.40.
- OSRD 4388 PBL 33211 (2-970)  
DeGarmo, E. Paul, and others  
Residual stresses in ship welding (NS-304). Progress report, Mar 1-Jun 31, 1944. Nov 1944.  
10p photos, drawings, diagrs, graphs. MI \$.300 Ph \$.700.  
See also PB 33209, 33210, and 61376.
- OSRD 4389 PBL 51008 (4-789)  
Simpson, Frank H., and Nicol, H.  
The study of the effect of muzzle brake design on the recoil of guns, I. Progress rept. n.d.  
2ip tables, graphs, photo, drawings. MI \$.100 Ph \$.200.
- OSRD 4392 PBL 28595 (2-440)  
Michigan University  
Development and construction of an exposure meter for use with a standard view finder in aerial photography. Final report, Jan 1945.  
50p photos, diagrs. MI \$.100 Ph \$.400.
- OSRD 4394 PBL 15857 (I-1414)  
Voldrich, C. B., and others  
Development of improved electrode coatings (OD-36-2). Progress report, Dec 15, 1943-Jul 15, 1944. Nov 1944.  
90p MI \$.100 Ph \$.600.
- OSRD 4395 PBL 22895 (2-201)  
Morton, J. T., and others  
Effect of locked up stresses on ballistic performance of welded armor (OD-106): Investigation of the stress distribution across the thickness of weld. Progress report. Nov 1944.  
24p curves, photo, tables. MI \$.50 Ph \$.200.
- OSRD 4396 PBL 22897 (2-38)  
Morton, John T., and others  
Effect of locked up stresses on ballistic performance of welded armor—Part II (OD-106). Final report, Nov 24, 1944. Nov 1944.  
6ip curves, diagrs, photos, tables. MI \$.100 Ph \$.600.
- OSRD 4397 PBL 20180 (I-1401)  
Smith, C. B.  
Flash welding of aluminum: Advisory report. Nov 1944.  
38p photos, tables. MI \$.50 Ph \$.300.
- OSRD 4398 PBL 19538 (I-1410)  
Ruder, W. E.  
Development and extension of precision casting methods for production of miscellaneous war material items (OD-144) Part I: Final report, Jul 25, 1944. Nov 1944.  
.32p photos, drawings. MI \$.50 Ph \$.300.
- OSRD 4399 PBA 15603 (I-983)  
LeTourneau, R. L., and others  
Tests with an exhaust aerosol DDT generator on a 450 h.p. Stearman aircraft. (Progress report.) Nov 1944.  
25p tabs, maps, diagrs. MI \$.50 Ph \$.200.
- OSRD 4402 PBL 22473 (2-238)  
Wakeman, Selman A., and Starkey, Robt. L.  
Paint destruction and metal corrosion: Microbiological aspects. Interim report 4: Feb 1-Mar 1, 1944. Nov 1944.  
50p MI \$.100 Ph \$.400.
- OSRD 4403 PBL 19508 (I-1414)  
Walmley, J. I., and Marsh, J. S.  
Review of literature on behavior of metals under multiaxial stresses: Final report. Part I. Nov 1944.  
7p MI \$.50 Ph \$.100.
- OSRD 4404 PBL 16426 (I-1502)  
Manildi, J. F., and others  
Non-destructive testing of flashwelds (OD-86): Final report. Nov 1944. Progress reports, Jan-Sep 1944.  

PB	OSRD	P	MI	Ph
16762	3210	73	\$1.00	\$5.00
16428	4144	24	.50	2.00
16427	4140	34	.50	3.00
16426	4404	130	1.50	9.00
- OSRD 4405 PBL 4023 (I-405)  
Viteles, Morris S., and others  
Learning range estimation on the firing line. 1944.  
20p MI \$.50 Ph \$.200.
- OSRD 4408 PBL 24889 (2-298)  
Hill, G. Albert, and Clarke, R. G.  
Colored flares. Progress report. Nov 1944.  
60p diagrs, graphs. MI \$.100 Ph \$.400.  
For suppl. see PB 24888.
- OSRD 4408-A PBL 24888 (2-213)  
Hill, G. Albert, and Clarke, R. G.  
Colored flares. Progress report. Feb. 1945.  
6p tables. MI \$.50 Ph \$.100.  
For original report see PB 24889.
- OSRD 4410 PBA 5857 (I-348)  
Yoe, John H., and Lindley, Charles H.  
Determination of water in hydrocyanic acid, to November 23, 1944. 1944.  
9p illus. MI \$.50 Ph \$.100.
- OSRD 4411 PBA 5860 (I-563)  
Tarbell, D. S., and Lindstrom, E. G.  
Additional observations on the synthesis of thiocarbazones, especially DPT. Nov 1944.  
.10p.
- OSRD 4412 PBA 5861 (I-533)  
Tarbell, D. S., and Lindstrom, E. G.  
Unsymmetrical diarylethylenes as detectors. 1944.  
18p Ph \$.200 MI \$.50.
- OSRD 4413 PBL 5865 (I-533)  
Tarbell, D. S., and Wystrach, V. P.  
Thiocetones as detectors for CW agents, to November 22, 1944. 1944.  
5p Ph \$.100 MI \$.50.
- OSRD 4414 PBA 5855 (I-355)  
Yoe, John H., and others  
Determination of fluorine in certain fluororganic compounds in water, to November 20, 1944. 1944.  
27p MI \$.50 Ph \$.200.
- OSRD 4415 PBL 19778 (2-15)  
Harris, Louis, and others  
Sputtered and evaporated thermopiles and studies of thin films of plastic materials: Final report Mar 1943.  
27p illus. MI \$.50 Ph \$.200.
- OSRD 4416 PBL 19653 (I-1353)  
Friedrichs, K. O., and others  
On supersonic compressors and nozzles. Oct 1944.  
2ip diagrs, tables. MI \$.50 Ph \$.200.  
Suppl. to PB 19652.
- OSRD 4417 PBL 28553 (2-219)  
Polaroid Corp.  
Report on optical plastic material: Synthesis, fabrication, and instrument design. Feb 1945.  
414p photos. MI \$.900 Ph \$.28.00.
- OSRD 4420 PBL 22381 (I-1526)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113; AC-77; M-119): Metallurgical examination of a Japanese Kinsai-43 aircraft engine. Progress report 127, Sep 18, 1944. Dec 1944.  
69p photos, tables. MI \$.100 Ph \$.50.00.
- OSRD 4421 PBL 22383 (I-1525)  
Jackson, L. R., and others  
Examination of enemy materiel (OD-113; AC-77; M-119): Metallurgical examination of a gyro compass from a Japanese aircraft "Val" Mark I. Progress report 135, Oct 26, 1944. Dec 1944.  
14p photos, tables. MI \$.50 Ph \$.100.
- OSRD 4422 PBL 22382 (I-1525)  
Jackson, L. R., and others  
Examination of enemy materiel (OD-113; AC-77; M-119): Metallurgical examination of a German aircraft fuel consumption meter and a blinker-type oxygen flowmeter. Progress report 137, Oct 30 1944. Dec 1944.  
19p MI \$.50 Ph \$.200.
- OSRD 4423 PBL 22384 (I-1507)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113; AC-77; M-119): Metallurgical examination of a Japanese bomb hoist and release. Progress report 136, Oct 30, 1944. Dec 1944.  
12p tables, photos. MI \$.50 Ph \$.100.
- OSRD 4424 PBL 22396 (I-1522)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113; AC-77; M-119): Metallurgical examination of oleo landing strut and wheel from Japanese "Sally," Mark II. Progress report 139, Oct 31, 1944. Dec 1944.  
18p photos, tables. MI \$.50 Ph \$.200.
- OSRD 4429 PBL 22385 (I-1522)  
Heusner, C. E., and others  
Examination of enemy materiel (OD-113; AC-77; M-119): Metallurgical examination of airframe sections from Japanese aircraft. Progress report 138, Oct 31, 1944. Dec 1944.  
14p photos, tables. MI \$.50 Ph \$.100.
- OSRD 4432 PBL 4633 (I-321)  
Standard Oil Company (Indiana)  
Development of flame thrower from M-5 tank. 1944.  
143p illus. Ph \$.10.00 MI \$.150.

## Bibliography

- OSRD 4433 PBL 28594 (2-535)  
bartley, S. Howard, and Chute, Eloise  
The effects of binocular magnification on the visibility of targets at low levels of illumination. Final report. Nov 1944.  
58p photos. MI \$2.00 Ph \$5.00.
- OSRD 4434 PB 4186 (I-320)  
Standard Oil Development Company  
Development of Mobile Servicing Unit for Flame Throwers. 1944.  
46p MI \$.50 Ph \$4.00.
- OSRD 4442 PBL 16469 (I-1247)  
Butts, Allison, and Reiber, Paul L., Jr.  
Investigation of the effects of impurities on the ferro-magnetism of nonferrous alloys (OD-156): Progress report, Jul 15-Oct 15, 1944. Dec 1944.  
57p tables, graphs. MI \$1.00 Ph \$4.00.
- OSRD 4444 PBL 28603 (2-441)  
Mihalyi, J., and others  
Antivibration-mounted binocular and monocular. Final report. Feb 1945.  
74p photos, drawings, curves. MI \$2.00 Ph \$.50.
- OSRD 4446 PBL 28699 (2-304)  
Mihalyi, J., and Harvey, D. C.  
High-speed anti-glare shutter production design. Final report. Sep 1945.  
34p drawings, photos. MI \$1.00 Ph \$3.00.
- OSRD 4447 PBA 15605 (I-983)  
LaMer, V. K., and others  
Toxicity of DDT to mosquitoes. Effect of particle size on the efficiency of oil aerosols bearing DDT. (Progress report) to October, 1944. Dec 1944.  
28p graphs, diagrs, tabs. MI \$.50 Ph \$2.00.
- OSRD 4452 PBL 19659 (2-322)  
Rushton, J. H., and others  
Central Engineering Laboratory, National Defense Research Committee. Section II.1 (Oxygen): Monthly progress report, Oct 1 to 31, 1944. Nov 1944.  
122p diagr, graphs, tables. MI \$1.50 Ph \$.50.
- OSRD 4453 PBL 20225 (I-1577)  
Dwurek, P. E., and others  
Behavior of the metals under dynamic conditions (NS-109): Progression of yielding. Progress report, Oct 15, 1944. Dec 1944.  
10p curves, drawing. MI \$.50 Ph \$1.00.
- OSRD 4454 PBL 22286 (I-1507)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-173; AC-77; N-119): Metallurgical examination of two Japanese mechanical impact fuzes and containers. Progress report 142, Nov 7, 1944. Dec 1944.  
9p photos. MI \$.50 Ph \$1.00.
- OSRD 4455 PBL 22387 (I-1526)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113; AC-77; N-119): Metallurgical examination of parts from a Japanese Manouru-II aircraft engine. Progress report 140, Oct 31, 1944. Dec 1944.  
34p photos, tables. MI \$.50 Ph \$3.00.
- OSRD 4457 PBL 15828 (I-1025)  
Edlund, D. L.  
Development of high strength gun steels; Progress report, Aug 15-Nov 15, 1944. Dec 1944.  
13p MI \$.50 Ph \$1.00.
- OSRD 4460 PBL 5952 (I-560)  
Salzberg, P. L., and others  
Protective and therapeutic agents for war gases—preparation of new antidotes, to June 15, 1943. 1944.  
53p MI \$1.00 Ph \$4.00.
- OSRD 4461 PBL 22872 (2-140)  
Urry, William D., and Hannan, P. J.  
The state of equilibrium among the carbon atoms of a propellant gas. Dec 1944.  
34p photos, tables. MI \$.50 Ph \$3.00.
- OSRD 4462 PBL 25406 (2-230)  
Sparkman and Stephens, Inc., New York  
Army 2½ ton amphibian truck 6x6, GMC DUKE-353, Final report. Nov 1944.  
127p graphs, plans, photos. MI \$3.00 Ph \$.50.
- OSRD 4463 PBL 22388 (2-34)  
Bartholomew, E. L., Jr., and others  
Examination of enemy materiel (OD-113; AC-77; N-119): Metallurgical investigation of German 170 mm. gun. Progress report 102, Oct. 30, 1944. Dec 1944.  
47p photos, drawings. MI \$.50 Ph \$4.00.
- OSRD 4464 PBL 22389 (I-1505)  
Bartholomew, E. L., Jr., and others  
Examination of enemy materiel (OD-113; AC-77; N-119): Metallurgical investigation of German 150 mm. gun tube. Progress report 103, Nov 10, 1944. Dec 1944.  
18p drawings, photos. MI \$.50 Ph \$2.00.
- OSRD 4465 PBL 22390 (I-1521)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113; AC-77; N-119): Metallurgical examination of a tail wheel assembly and landing gear hydraulic retracting strut from a Japanese aircraft "Dinah." Progress report 141, Nov 3, 1944. Dec 1944.  
17p tables, photos. MI \$.50 Ph \$2.00.
- OSRD 4468 PBL 4649 (I-323)  
Thompson, Norman J., and Kling, Alan L.  
Evaluation of incendiary fuels and bombs on industrial building occupancies. 1944.  
42p illus. Ph \$3.00 MI \$.50.
- OSRD 4469 PBL 4645 (I-320)  
Thompson, N. J., and Kling, Alan L.  
Design and testing of a simple target structure to simulate typical industrial incendiary centers. 1944.  
42p illus. Ph \$3.00 MI \$.50.
- OSRD 4470 PBA 5958 (I-352)  
Mason, G. W., and Delamater, G. B.  
Microscopic properties of 2,4-dinitro-phenylhydrazine derivatives of certain CW agents. 1944.  
23p illus. Ph \$2.00 MI \$.50.
- OSRD 4472 PBL 5229 (I-372)  
Hay, G. E.  
Gun equilibrators I. 1944.  
58p illus. Ph \$4.00 MI \$.50.
- OSRD 4475 PBL 16424 (I-1027)  
Tucker, C. M., and others  
Residual stresses in cold-drawn nonferrous alloys (OD-25): An X-ray study. Final report, part IV: Jun 15, 1944-Oct 31, 1944. Dec 1944.  
155p graphs. MI \$2.00 Ph \$11.00.
- OSRD 4479 PBL 43042 (3-790)  
Kell, R. D.  
Improved sensitivity of television equipment. Progress report No. 6, Apr 1-Jun 1, 1944. Jun 1944.  
4p diagr. MI \$1.00 Ph \$1.00.  
See also PB 43037-PB 43041.
- OSRD 4480 PBL 43043 (3-790)  
Kell, R. D.  
Improved sensitivity of television equipment. Progress report No. 7, Jun 1-Aug 1, 1944. Aug 1944.  
3p MI \$.50 Ph \$1.00.  
See also PB 43037-PB 43042.
- OSRD 4484 PBL 19819 (2-55)  
Kelly, Truman L.  
An activity-preference test for the classification of service personnel. Final report, Dec 1944.  
168p charts, tables. MI \$2.00 Ph \$12.00.
- OSRD 4487 PBL 34766 (3-255)  
Africano, A., and McClure, F. T.  
Investigation of a proposed liquid carbon dioxide rocket. Dec 1944.  
15p diagr, tables. MI \$1.00 Ph \$2.00.
- OSRD 4488 PBL 5230 (I-356)  
Massachusetts Institute of Technology, High Voltage Laboratory  
Final report on the M.I.T. project in high voltage radiography. 1945. Vol 1—Brief introduction and summary.  
20p Ph \$2.00, complete report \$47.00.  
MI \$.50, complete report \$7.50.
- OSRD 4488 PBL 5231 (I-356)  
Massachusetts Institute of Technology, High Voltage Laboratory  
Final report on the M.I.T. project in high voltage radiography. 1945. Vol. 2—Two-million-volt electrostatic X-ray generator.  
152p illus. Ph \$11.00, complete report \$7.00. MI \$2.00, complete report \$7.50.
- OSRD 4488 PBL 5232 (I-356)  
Massachusetts Institute of Technology, High Voltage Laboratory  
Final report on the M.I.T. project in high voltage radiography. 1945. Vol. 3—Design and developmental research in connection with high voltage electrostatic generator.  
133p illus. Ph \$9.00, complete report \$7.00. MI \$1.50, complete report \$7.50.
- OSRD 4488 PBL 5233 (I-356)  
Massachusetts Institute of Technology, High Voltage Laboratory  
Final report on the M.I.T. project in high voltage radiography. 1945. Vol 4—Production, absorption and scattering of high voltage X-rays.  
113p illus. Ph \$8.00, complete report \$7.00. MI \$1.50, complete report \$7.50.
- OSRD 4488 PBL 5234 (I-356)  
Massachusetts Institute of Technology, High Voltage Laboratory  
Final report on the M.I.T. project in high voltage radiography. 1945. Vol. 5—High voltage radiographic techniques and accessories.  
106 illus. Ph \$8.00, complete report \$7.00. MI \$1.50, complete report \$7.50.

## *Bibliography*

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- |           |                    |   |
|-----------|--------------------|---|
| OSRD 4488 | PBL 5235 (I-356)   | Massachusetts Institute of Technology, High Voltage Laboratory  |
|           |                    | Final report on the M.I.T. project in high voltage radiography. 1945. Vol. 6—Photographic aspects of high voltage radiography.                          |
|           |                    | 87p illus. Ph \$6.00, complete report \$47.00. Mi \$1.00, complete report \$7.50.   |
| OSRD 4488 | PBL 5236 (I-356)   | Massachusetts Institute of Technology, High Voltage Laboratory  |
|           |                    | Final report on the M.I.T. project in high voltage radiography. 1945. Vol. 7—Detailed drawings of X-ray generator parts.                                |
|           |                    | 87p illus. Ph \$7.00, complete report \$47.00. Mi \$1.00, complete report \$7.50.   |
| OSRD 4489 | PBL 18334 (I-1270) | Lindsay, Donald B., and others  |
|           |                    | A radar trainer and flash-reading method for operators of the plan position indicator. Dec 1944.  |
|           |                    | 18p photo, diagrs. Mi \$.50 Ph \$2.00.  |
| OSRD 4490 | PBL 18469 (I-1429) | Munse, W. H., and Richart, F. E.  |
|           |                    | Impact tests of reinforced concrete beams, III, Final report. Dec 1944.   |
|           |                    | 82p graphs, tables, photos. Mi \$1.00 Ph \$6.00.  |
| OSRD 4493 | PBA 9383 (I-761)   | Sagenkahn, M. L., and Fink, H. L.   |
|           |                    | Vapor-liquid equilibrium for the system oxygen-nitrogen-argon, to December 7, 1944. Dec 1944.   |
|           |                    | 133 illus. Mi \$.50 Ph \$9.00.  |
| OSRD 4494 | PBA 5050 (I-472)   | Yoe, John H., and others  |
|           |                    | Determination of iron in CK, cyanuric chloride, and CK polymer, to December 9, 1944. 1944.  |
|           |                    | 14p Mi \$.50 Ph \$1.00.   |
| OSRD 4497 | PBL 15829 (I-1281) | Mravec, J. F., and others   |
|           |                    | Control of basic open hearth melting practice for the manufacture of wrought gun tubes (OD-34-3). Final report, Oct 1, 1944. Dec 1944.                  |
|           |                    | 56p Mi \$1.00 Ph \$4.00.  |
| OSRD 4499 | PBL 28502 (2-440)  | Carnegie Institution of Washington, Mount Wilson Observatory  |
|           |                    | Optical tests of the Bausch and Lomb tele-stigmat F/8, focal length 40 inches. Dec 1944.  |
|           |                    | 17p photos, curves. Mi \$1.00 Ph \$2.00.  |
| OSRD 4500 | PBL 28834 (2-440)  | Eastman Kodak Co., Rochester, N. Y.   |
|           |                    | The molding of glass for optical purposes. Sep 1945.  |
|           |                    | 63p photos, drawing. Mi \$2.00 Ph \$5.00.   |
| OSRD 4501 | PBL 28500 (2-441)  | Henney, L. G., and others   |
|           |                    | Reflex sights. Final report. Apr 1945.  |
|           |                    | 38p Mi \$1.00 Ph \$3.00.  |
| OSRD 4502 | PBL 28523 (2-613)  | Henney, L. G., and others   |
|           |                    | Unit power periscopes. Final report Sep 1945.   |
|           |                    | 34p drawings and tables. Mi \$1.00 Ph \$3.00.   |
| OSRD 4503 | PBL 16447 (I-1043) | Henney, L. G., and others   |
|           |                    | Tank and antitank telescopes. Oct 1945.   |
|           |                    | 55p Mi \$1.00 Ph \$4.00.  |
| OSRD 4504 | PBL 28519 (2-613)  | Henney, Louis G., and Greenstein, Jesse L.  |
|           |                    | Wide field fast cameras. Final report. Apr 1945.  |
|           |                    | 31p drawings, tables. Mi \$1.00 Ph \$3.00.  |
| OSRD 4505 | PBL 28691 (2-358)  | Henney, L. G., and Greenstein, J. L.  |
|           |                    | Miscellaneous optical designs. Final report. Oct 1945.  |
|           |                    | 56p diagrs. Mi \$2.00 Ph \$4.00.  |
| OSRD 4506 | PBL 28536 (2-359)  | Perkin-Elmer Corp.  |
|           |                    | Optical working of synthetic crystals. Final report. Apr 1945.  |
|           |                    | 7p Mi \$1.00 Ph \$1.00.   |
| OSRD 4507 | PBL 22308 (I-1580) | Grenell, L. H., and others  |
|           |                    | Examination of enemy materiel; Metallurgical examination of a German 7.92 mm. MG-17 aircraft machine gun. Progress report 143, Nov 19, 1944. Dec 1944.  |
|           |                    | 21p photos. Mi \$.50 Ph \$2.00.   |
| OSRD 4512 | PBL 22475 (2-238)  | Nelson, T. C., and Kodet, E. R.   |
|           |                    | Paint destruction and metal corrosion: Zoological aspects. Interim report 5, Feb 1-Nov 1, 1944. Dec 1944.   |
|           |                    | 16p photos. Mi \$.50 Ph \$2.00.   |
| OSRD 4513 | PBA 34752 (2-945)  | Shanor, Leland, and others  |
|           |                    | Fungus-proofing of textiles and cordage for use in tropical service. Jan 1945.  |
|           |                    | 60p Mi \$2.00 Ph \$4.00.  |
| OSRD 4515 | PBL 31012 (2-990)  | Gregg, E. C., Jr.   |
|           |                    | Description of the equipment used in the measurement of underwater acoustic transients. Dec 1944.   |
|           |                    | 15p diagrs. Mi \$1.00 Ph \$1.00.  |
| OSRD 4516 | See OSRD 3523.     |   |
| OSRD 4517 | PBL 63650 (5-294)  | Grinstead, Carl E.  |
|           |                    | Inductor compass tests on a M3A1 flight tank, June-July 1944. Nov 1944.   |
|           |                    | 39p photos, graphs. Mi \$1.00 Ph \$3.00.  |
| OSRD 4519 | PBL 28604 (2-535)  | Carnegie Institution of Washington, Mount Wilson Observatory  |
|           |                    | Optical tests of the Harvard College Observatory distortionless apochromat F/8, focal length 36 inches. Oct 1944.                                       |
|           |                    | 24p photos, curves. Mi \$1.00 Ph \$2.00.  |
| OSRD 4521 | PBL 4650 (I-318)   | Hershberg, E. B., and Dakin, Morrell  |
|           |                    | Modified M-52 two-pound magnesium bomb for use against Japan. 1945.   |
|           |                    | 21p illus. Ph \$2.00 Mi \$.50.  |
| OSRD 4522 | PBL 4608 (I-370)   | Betts, R. L.  |
|           |                    | Effect of thickener and gasoline on the properties of Napalm fuels. 1946.   |
|           |                    | 35p Ph \$3.00 Mi \$.50.   |
| OSRD 4529 | PBL 5870 (I-538)   | Fusion, R. C., and others   |
|           |                    | Synthesis and characterization of 2-chloroethyl 2,2-dichloroethyl sulfide (CH <sub>2</sub> ClCH <sub>2</sub> SCl), to December 1, 1944. 1945.           |
|           |                    | 14p illus. Ph \$1.00 Mi \$.50.  |
| OSRD 4532 | PBA 5870 (I-538)   | Fusion, R. C., and others   |
|           |                    | Synthesis and characterization of 2-chloroethyl 2-hydroxyethyl sulfide (CH <sub>2</sub> ClCH <sub>2</sub> SH), to December 1, 1944. 1945.               |
|           |                    | 13p Ph \$1.00 Mi \$.50.   |
| OSRD 4533 | PBA 5054 (I-406)   | Hamilton, C. S., and others   |
|           |                    | Organic arsenicals and other toxic agents, to Sept. 1, 1944. 1945.  |
|           |                    | 63p Mi \$1.00 Ph \$5.00.  |
| OSRD 4535 | PBA 5891 (I-476)   | Bergmann, Max, and others   |
|           |                    | Chemical reactions of the nitrogen mustards. 1945.  |
|           |                    | 26p Ph \$2.00 Mi \$.50.   |
| OSRD 4536 | PBA 5899 (I-1142)  | Bergmann, Max, and others   |
|           |                    | Chemical reactions of semi-H and H, to December 15, 1944. Jan 1945.   |
|           |                    | 25p Mi \$.50 Ph \$2.00.   |
| OSRD 4538 | PBL 5959 (I-557)   | Northrop, John H.   |
|           |                    | Electro-magnetic gas pump. Informal progress report to November 20, 1944. 1945.   |
|           |                    | 12p illus. Mi \$.50 Ph \$1.00.  |
| OSRD 4539 | PBL 32213 (2-817)  | LaMer, Victor K., and others  |
|           |                    | Testing of daytime distress signals. Progress report, Sep 19, 1944. Jan 1945.   |
|           |                    | 15p curve. Mi \$1.00 Ph \$1.00.   |
| OSRD 4540 | PBL 28620 (2-530)  | Ryon, L. B.   |
|           |                    | Suppression of dust around artillery emplacements. Chemical treatment of ground. Progress report. Jan 1945.   |
|           |                    | 40p photos. Mi \$1.00 Ph \$3.00.  |
| OSRD 4541 | PBL 33247 (2-822)  | Eastman Kodak Co., Rochester, N. Y.   |
|           |                    | Influence of color contrast on visual acuity. Nov 1944.   |
|           |                    | 120 p photos, drawings, tables. Mi \$3.00 Ph \$8.00.  |
| OSRD 4543 | PBL 19822 (I-1523) | Godfrey, H. J.  |
|           |                    | Corrosion fatigue failure of aircraft control cables (N-101); Fatigue tests under service loads. Progress report 5, Jan 1, 1944-Nov 30, 1944. Dec 1944. |
|           |                    | 93p tables, photos, curves, drawings. Mi \$1.00 Ph \$7.00.  |
|           |                    | See also PBA's 19812, 19813, 19815, 19821, 19831, 19832 and 19835.  |

- OSRD 4544 PBL 20224 (I-1504)  
Stout, R. D., and others  
Weldability of steel for hull construction (NS-255): Methods of testing weldability of steel plates and shapes. Progress report, Oct 1944. Dec 1944.  
13p tables, graphs. MI \$.50 Ph \$1.00.
- OSRD 4546 PBA 5912 (I-1142)  
Bergmann, Max, and others  
Chemical reactions of divinyl sulfone, H Sulfone, and divinyl sulfoxide; Progress report, to Dec 1, 1944. Jan 1945.  
72p MI \$.100 Ph \$5.00.
- OSRD 4548 PBL 22309 (I-1521)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of an H.E. 15 cm. Japanese naval projectile. Progress report I45, Nov 30, 1944. Jan 1945.  
8p photos. MI \$.50 Ph \$1.00.
- OSRD 4549 PBL 22311 (I-1581)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of two welded aluminum sections from a German mine. Progress report I48, Dec 12, 1944. Jan 1945.  
6p diagrs. MI \$.50 Ph \$1.00.
- OSRD 4550 PBL 15260 (I-1034)  
Biberstein, Frank A., Jr., and others  
Static band pressures in 37mm projectiles, I. Dec 1944.  
72p photos, tabs, charts, graphs.  
MI \$1.00 Ph \$5.00.
- OSRD 4552 PBL 50795 (I-870)  
Eastman Kodak Co., Rochester, N.Y.  
Investigations of high-speed aerial camera shutters. Jan 1944.  
12p photo. MI \$.100 Ph \$1.00.
- OSRD 4553 PBL 20226 (I-1498)  
Davis, Harmer E., and others  
Behavior of steel under conditions of multi-axial stresses and effect of welding and temperature on this behavior (NS-308): Pilot tests of small tubular specimens. Progress report, Oct 15, 1944. Jan 1945.  
77p photos, drawings, diagrs, graphs.  
MI \$.100 Ph \$5.00.
- OSRD 4554 PBL 16743 (I-1025)  
Cross, Howard C.  
Machining data on heat-resisting metals for gas turbine parts (N-102): Progress report. Jan 1945.  
22p MI \$.50 Ph \$2.00.
- OSRD 4556 PBL 9381 (I-605)  
Lobo, M. E.  
Report on "Oxygen plant development." 1945.  
564p illus. MI \$8.00 Ph \$38.00.
- OSRD 4557 PBL 58228 (I-967)  
Gulf Research & Development Co., Pittsburgh  
Experimental investigations in connection with high angle dirigible bombs: Early RAZOR experiments. Progress report, Sep 1, 1944. Sep 1944.  
72p photos, diagrs, graphs.  
MI \$2.00 Ph \$5.00.
- OSRD 4560 PBL 58192 (I-865)  
Gulf Research & Development Co., Pittsburgh  
Suggestions for AZON'bomb (VB-1) manual for bombardiers. Nov 1944.  
26p graphs, diagrs. MI \$.100 Ph \$2.00.
- OSRD 4561 PBL 22873 (2-338)  
Cole, R. H.  
The use of electrical cables with piezo-electric gauges. Jan 1945.  
49p charts, graphs. MI \$.50 Ph \$4.00.
- OSRD 4564 PBA 30752 (2-827)  
Lingane, James J.  
Polarographic investigation of nitro compounds. Progress report. Jan 1945.  
9p tables. MI \$.100 Ph \$1.00.
- OSRD 4565 PBL 32214 (2-743)  
Chamney, H. H., and others  
The development of a portable aerosol smoke pot. Final report. Oct 2, 1944. Jan 1945.  
35p diagrs, photos. MI \$.100 Ph \$3.00.
- OSRD 4567 See OSRD 4086
- OSRD 4570 PBL 22874 (2-336)  
Lompson, C. W., and Bleakney, Walker  
Mobile oscillographic laboratory. Final report. Jan 1945.  
82p Diagr. MI \$.100 Ph \$5.00.
- OSRD 4571 PBL 21121 (I-1444)  
MacLeod, James A.  
Sea marking devices. Jan 1945.  
18p drawings. MI \$.50 Ph \$2.00.
- OSRD 4578 PBL 11215 (I-797)  
Kouwenhoven, W. B.  
Development of methods for determining the proper seating of gilding-metal rotating bands on 105 mm. shells in production; Progress report. Jan 1945.  
39p photos, drawings. MI \$.50 Ph \$3.00.
- OSRD 4583 PBL 22310 (I-1582)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of Japanese 75 mm. A.A. ammunition. Progress report I44, Nov 24, 1944. Jan 1945.  
20p MI \$.50 Ph \$2.00.
- OSRD 4584 PBL 22478 (I-1602)  
Maurer, Frank W.  
Full-face oxygen mask incorporating ventilated fog-proof lenses. Jan 1945.  
18p photos. MI \$.50 Ph \$2.00.
- OSRD 4585 PBM 5908 (I-559)  
Hutchens, John O., and others  
A new chamber for the determination of toxicities by total, body, or head exposure, to December 12, 1944. 1945.  
15p illus. Ph \$1.00 MI \$.50.
- OSRD 4586 PBA 5905 (I-496)  
Folkers, Karl, and others  
Studies on the preparation of nonvolatile toxic agents, to December 31, 1943. 1945.  
12p Ph \$1.00 MI \$.50.
- OSRD 4587 PBL 33350 (2-863)  
Fonda, G. R.  
Stimulation and phosphorescence of zinc sulfide phosphors. Report IV. Dec 1944.  
7p diagrs. MI \$.100 Ph \$1.00.
- OSRD 4588 PBL 33384 (2-862)  
Barnett, C. E.  
Development of improved long afterglow phosphors. Progress report, Jun 1-Oct 10, 1944. Oct 1944.  
8p curves. MI \$.100 Ph \$1.00.
- OSRD 4593 PBL 22312 (I-1582)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of a type 91, Change 3, 18-inch, Japanese torpedo. Progress report I46, Dec 8, 1944. Jan 1945.  
54p tables. MI \$.100 Ph \$5.00.
- OSRD 4597 PBL 22313 (I-1573)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of Japanese aircraft armor plate. Progress report I48, Dec 11, 1944. Jan 1945.  
7p photos, tables. MI \$.50 Ph \$1.00.
- OSRD 4600 PBA 5938 (I-471)  
Sease, J. W., and others  
A study of the Iodoplatinate method for the determination of H in 50% acetic acid, to Dec 8, 1944. Jan 1945.  
75p illus. MI \$.100 Ph \$5.00.
- OSRD 4601 PBL 4846 (I-323)  
Thompson, Norman J., and Kling, Alan L.  
Modified M50 incendiary bomb and development of test target. 1945.  
23p illus. Ph \$2.00 MI \$.50.
- OSRD 4602 PBL 19821 (I-1523)  
Godfrey, H. J., and others  
Corrosion fatigue failure of aircraft control cables (N-101): Miscellaneous tests. Progress report 6, Jan 1, 1944-Dec 31, 1944. Jan 1945.  
56p photos, diagr, tables, curves.  
MI \$.100 Ph \$4.00.
- OSRD 4604 PBM 5953 (I-481)  
Salzberg, P. L., and others  
Therapeutic agents for war gases—BAL derivatives and analogs. 1945.  
50p Ph \$4.00 MI \$.100.
- OSRD 4612 PBL 12141 (I-862)  
Miklowitz, Julius  
The initiation and propagation of the plastic zone in mild steel tension bar. Final Report. Jan 1945.  
73p illus. MI \$.100 Ph \$5.00.
- OSRD 4613 PBL 5220 (I-483)  
Almy, G. M., and others  
Three to twenty million volt radiography. Progress Report, Jan. 1, 1945. 1945.  
29p illus. Ph \$2.00 MI \$.50.
- OSRD 4615 PBL 5583 (I-454)  
Hotelling, Harold  
Air testing sample bomb sights. 1944.  
103p MI \$.150 Ph \$7.00.
- OSRD 4619 PBL 22875 (2-647)  
Silverman, Daniel, and Lang, H. M.  
Development of blast-pressure gauges and recording equipment, to October 1, 1944. Jan 1945.  
58p photos, diagrs. MI \$.100 Ph \$4.00.  
See also PB 23192.
- OSRD 4620 See OSRD 3827.

## Bibliography

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- OSRD 4621 PBL 20221 (I-1499)  
Duwez, P. E., and others  
Behavior of metals under dynamic conditions (MS-109): Preliminary study of the influence of rapid loading and time at load on the initiation of plastic deformation in tension. Progress report, Dec 1, 1944. Jan 1945. 32p photos, diagrs, tables. Mi \$.50 Ph \$3.00.
- OSRD 4623 See OSRD 3523.
- OSRD 4626 PBL 6703 (I-551)  
Sachs, George, and Lubahn, J. D.  
Correlation of information available on the fabrication of aluminum alloys (MA-126): Section V—Formability of aluminum alloys for use in military aircraft. Part III—Stretch forming of angles with outer leg in tension. Final report. Dec 1944. 39p curves, photos, tables. Mi \$.50 Ph \$3.00.
- OSRD 4627 PBA 5939 (I-408)  
Gould, Clark, and others  
The recovery of H vapor from air by bubblers containing 50% acetic acid, diethyl phthalate, 0.5 N sulfuric acid, ethanol, or pyridine B, 1945. 125p Ph \$9.00 Mi \$1.50.
- OSRD 4629 PBL 11564 (I-674)  
Tarbell, D. S., and others  
A systematic scheme for the detection of toxics on plain silicon tubes. 1945. 31p Mi \$.50 Ph \$3.00.
- OSRD 4636 PBL 13294 (I-900)  
Conrad, Herbert S.  
A statistical evaluation of the basic classification test battery (Form I). May 1945. 105p Mi \$.50 Ph \$7.00.
- OSRD 4637 PBA 5907 (I-1427)  
Coon, Julius M., and others  
Phosgen: Special studies to January 2, 1945. 38p Mi \$.50 Ph \$3.00.
- OSRD 4639 PBM 5906 (I-430)  
Lushbaugh, Clarence C., and others  
The intrapulmonic accumulation and effects on inhaled lubricating oil and S.G.F. No. 1 oil in monkeys, to January 8, 1945. 1945. 18p Ph \$2.00 Mi \$.50.
- OSRD 4645 PBL 15647 (I-1014)  
Ladenburg, Rudolph, and Winckler, John  
Description of Flash Integrator, Model II. Report Princeton University Station. National Defense Research Committee, Section 16.5. Dec 1944. 26p photos, diagrs. Mi \$.50 Ph \$2.00.
- OSRD 4646 PBL 12070 (I-1097)  
Ladenburg, Rudolf, and Winckler, John  
Description of flashmeter. Oct 1944. 27p photos, diagrs, tabs, charts, graphs. Mi \$.50 Ph \$2.00.
- OSRD 4647 PBL 19823 (2-35)  
De Forest, A. V., and Shapier, P. R.  
Investigation of factors reducing the effective ductility of welded steel members. Final report, Nov 1, 1943-Nov 15, 1944. Feb 1945. 51p photos, graphs, drawings. Mi \$1.00 Ph \$.40.
- OSRD 4648 PBL 19774 (I-1366)  
Dienel, H. F.
- Sound level measurements in U. S. Military airplanes, volume 3. Feb 1945. 65p - Mi \$1.00 Ph \$5.00. See also OSRD 3681.
- OSRD 4653 PBL 19544 (I-1497)  
Barrett, Charles, and others  
Deformation characteristics of magnesium alloys (NA-148): Final report. Jan 1945. 88p Mi \$1.00 Ph \$6.00.
- OSRD 4654 PBL 16431 (I-1323)  
Voldrich, C. B., and others  
Flash welding of alloy steels for ordnance (OD-86): Part I—controlled atmospheres. Final report, Mar 15, 1944 to Dec 31, 1944. Jan 1945. 67p diagrs, photos, tables. Mi \$1.00 Ph \$5.00.
- OSRD 4656 PBL 18485 (I-941)  
Wyman, L. L.  
Development and extension of precision casting methods for production of miscellaneous war materiel items (OD-144). Final report, Part II. Dec 1944. Jan 45. 38p illus. Mi \$.50 Ph \$3.00.
- OSRD 4662 PBA 5480 (I-313)  
Kaplan, L., and Koller, C. R.  
The synthesis of toxic carbamates of amino-alcohols (Doryl homologs and analogs), to November 15, 1944. 1945. 19p Ph \$2.00 Mi \$.50.
- OSRD 4672 PBA 30753 (2-627)  
Noyes, Richard M.  
The estimation of moisture in solventless double-base powders. Progress report. Feb 1945. 24p Mi \$1.00 Ph \$2.00.
- OSRD 4673 PBL 2570 (I-212)  
Pray, H. A., and Fink, F. W.  
Final report on development and evaluation of an economical corrosion resisting alloy for Quartermaster items. 1945. 24p Mi \$.50 Ph \$2.00.
- OSRD 4676 PBA 5909 (I-481)  
Price, Charles C., and others  
Equilibria in Aqueous Chloramine-T solutions-F. 1945. 9p illus. Ph \$1.00 Mi \$.50.
- OSRD 4677 PBA 5482 (I-353)  
Tarbell, D. S., and Bunnell, J. F.  
The reaction between DBT and arsenicals. 1945. 24p illus. Ph \$2.00 Mi \$.50.
- OSRD 4678 PBA 4450 (I-674)  
Mason, C. W., and others  
The microscopical identification of derivatives of certain chemical warfare agents by reaction with 2, 4-Dinitrophenylhydrazine, to Jan. 30, 1945. 1945. 22p Mi \$.50 Ph \$2.00.
- OSRD 4679 PBA 34800 (3-7)  
Lee, Thomas  
The volumetric determination of H by means of chloramine T or other oxidizing agents. Progress report, Jan 19, 1945. Feb 1945. 51p graphs, tables. Mi \$2.00 Ph \$4.00.
- OSRD 4680 PBA 5910 (I-348)  
Sease, J. W.
- A study of the chloramine T-o-tolidine method for the determination of H in 50% acetic acid. 1945. 51p illus. Ph \$4.00 Mi \$.10.
- OSRD 4681 PBL 12160 (I-904)  
Mason, Harry M.  
Phonetic characteristics of words as related to their intelligibility in aircraft-type noise. Feb 1945. 30p Mi \$.50 Ph \$2.00.
- OSRD 4682 PBA 5918 (I-578)  
Northrop, John H., and Gettemans, John M.  
Portable apparatus for rapid estimation of H or other gases which react with bromine, to December 20, 1944. 1945. 18p illus. Ph \$2.00 Mi \$.50.
- OSRD 4683 PBA 5878 (I-537)  
Bartlett, Paul D., and Swain, C. Gardner  
The mechanism of hydrolysis and displacement of mustard chlorhydrin and mustard in aqueous solutions, to September 25, 1944. 1945. 66p illus. Ph \$5.00 Mi \$.50.
- OSRD 4684 PBL 12052 (I-781)  
Hartley, Eugene L., and Jones, Dorothea B.  
The selection of emotionally unstable personnel by battle noise equipment. Feb 1945. 33p Mi \$.50 Ph \$1.00.
- OSRD 4690 PBL 33253 (2-824)  
Stockbarger, Donald C., and Early, Marie  
Artificial optical fluorite. Dec 1944. 187p photos, diagrs, graphs, tables. Mi \$.40 Ph \$13.00.
- OSRD 4691 PBL 28621 (2-626)  
Bates, J. Bertram  
Advanced positions identification. Final report. Feb 1945. 23p Mi \$.100 Ph \$2.00.
- OSRD 4695 PBL 22314 (I-1580)  
Bartholomew, E. L., Jr., and others  
Examination of enemy materiel: Metallurgical investigation of German 50 mm gun tubes. Progress report 104, Jan 1, 1945. Feb 1945. 53p drawings, graphs, photos. Mi \$100 Ph \$4.00.
- OSRD 4696 PBL 22315 (I-1582)  
Grenell, L. H., and others  
Examination of enemy materiel: Metallurgical examination of Japanese 37 mm A.P., H.E. ammunition. Progress report 147, Jan 8, 1945. Feb 1945. 17p diagrs. Mi \$.50 Ph \$2.00.
- OSRD 4697 PBL 22316 (I-1567)  
Grenell, L. H., and others  
Examination of enemy materiel: Metallurgical examination of hardware from Japanese and German parachute harnesses. Progress report 151, Jan 12, 1945. Feb 1945. 11p photos, tables. Mi \$.50 Ph \$1.00.
- OSRD 4699 PBL 13102 (I-823)  
Eyring, Carl, F.  
Jungle acoustics. Feb 1945. 162p illus. Mi \$2.00 Ph \$11.00.
- OSRD 4700 PBL 32216 (2-744)  
Rice, R. L., and others  
Plasticized white phosphorus in small smoke munitions. Progress report, Nov 15, 1944. Feb 1945. 25p diagrs, photos, tables. Mi \$1.00 Ph \$2.00.

## Bibliography

- OSRD 4701 PBA 40556 (3-549)  
Bartlett, Paul D., and others  
Composition of a sample of technical DDT from the DuPont Company. Progress report, Nov 9, 1944. Feb 1945.  
16p graph. MI \$1.00 Ph \$2.00.  
See also PB 5488 and PB 6011.
- OSRD 4702 PBL 5488 (1-470)  
Drake, Nathan L., and others  
The composition of a sample of technical DDT from Merck & Co., Inc., to December 15, 1944. 1945.  
31p Ph \$3.00 MI \$0.50.
- OSRD 4703 PBA 6011 (1-470)  
Newman, Melvin S., and others  
The composition of DDT "by-product oils" from Hercules Powder Company, to November 15, 1945. 1945.  
13p Ph \$1.00 MI \$.50.
- OSRD 4704 PBL 13101 (1-824)  
Eyring, Carl, F.  
Recordings of jungle sounds. Feb. 1945.  
70p illus. MI \$1.00 Ph \$5.00.
- OSRD 4707 PBL 28608 (2-391)  
Miller, O. M., and Singleton, Robert  
Summary description of existing mapping systems in the United States. May 1945.  
48p MI \$1.00 Ph \$4.00.
- OSRD 4708 PBL 28606 (2-391)  
Singleton, Robert  
A procedure for determining the orientation of aerial photographs by pairs. Feb 1945.  
26p MI \$1.00 Ph \$2.00.
- OSRD 4709 PBL 28695 (2-219)  
Singleton, Robert  
Fixed projection cameras for rectifying high oblique aerial photographs. Oct 1945.  
65p diagrs, photos. MI \$2.00 Ph \$5.00.
- OSRD 4710 PBL 28609 (2-441)  
Singleton, Robert, and Thralls, Marvin  
An enlarging camera for use with a fixed rectifier. May 1945.  
28p MI \$1.00 Ph \$2.00.
- OSRD 4711 PBL 28607 (2-441)  
Kissam, Phillip, and Singleton, Robert  
A stereoscopic plotter for contouring in orthogonal projection from rectified aerial photographs. Apr 1945.  
19p photos, diagrs. MI \$1.00 Ph \$2.00.
- OSRD 4714 PBL 28610 (2-391)  
Singleton, Robert, and others  
A system for mapping from high oblique aerial photographs. Jun 1945.  
28p MI \$1.00 Ph \$2.00.
- OSRD 4715 PBA 5484 (1-1143)  
Mason, C. W., and Delamater, G. B.  
Microscopical properties of derivatives of fluorine agents, to February 10, 1945. Progress report. Feb 1945.  
15p diagrs. MI \$.50 Ph \$1.00.
- OSRD 4717 PBL 18484 (1-1024)  
Cross, Howard C., and Simmons, Ward F.  
Heat-resisting metals for gas turbine parts. (N-102). Progress report. Feb 1945.  
176p illus.  
MI \$2.00 Ph \$12.00.
- OSRD 4729 PBL 20219 (1-1498)  
Duwez, P. E., and others  
Behavior of metals under dynamic conditions (N-109): Application of pure strain rate tests to an investigation of two 76 mm. gun Tubes. Progress report, Dec 15, 1944. Feb 1945.  
30p photos, drawings, diagrs, tables.  
MI \$.50 Ph \$2.00.
- OSRD 4731 PBL 16733 (1-1012)  
Duffin, R. J.  
The step-writer. Feb 1945.  
8p photos, diagrs. MI \$.50 Ph \$1.00.
- OSRD 4732 See OSRD 3623.
- OSRD 4733 PBL 32218 (2-658)  
Edwards, D. G., and others  
The burning properties and anti-personnel effect of PMP. Progress report. Sep 15, 1944. Mar 1945.  
12p photos, curves. MI \$1.00 Ph \$2.00.
- OSRD 4736 PBL 28533 (2-358)  
Carnegie Institution of Washington. Mount Wilson Observatory  
Report on reflex sights. Mar 1945.  
29p diagrs, photos. MI \$1.00 Ph \$2.00.
- OSRD 4737 PBL 28538 (2-418)  
Carnegie Institution of Washington. Mount Wilson Observatory  
Instruments for studying pursuit curves. May 1945.  
28p photos, diagr, drawing.  
MI \$1.00 Ph \$2.00.
- OSRD 4738 PBL 28534 (2-358)  
Carnegie Institution of Washington. Mount Wilson Observatory  
Report on resolution of aerial cameras in the laboratory and in the air. Mar 1944.  
58p curves, photos, tables.  
MI \$2.00 Ph \$4.00.
- OSRD 4739 PBL 28535 (2-359)  
Carnegie Institution of Washington. Mount Wilson Observatory  
Final report on shutter development for aerial photography. I. Larger multiple-slit shutter. II Modification of 24" K-17 shutter. Mar 1945.  
39p photos, drawings, curves.  
MI \$1.00 Ph \$3.00.
- OSRD 4740 PBL 51033 (4-1067)  
Harvard University, Optical Research Laboratory  
Report on the optical research laboratory at Harvard. Dec 1945.  
44p photos. MI \$1.00 Ph \$3.00.
- OSRD 4742 PBL 23699 (2-257)  
Brillouin, Leon  
Electronic theory of the cylindrical magnetron, static characteristics. Feb 1945.  
50p curves. MI \$.50 Ph \$4.00.
- OSRD 4743 PBL 50824 (4-486)  
Gongwer, C. A.  
The fluid gyroscope. Completion report. Feb 1945.  
16p drawings, photos. MI \$1.00 Ph \$2.00.
- OSRD 4746 PBL 12182 (1-902)  
Keislar, Evan R.  
The selectometer, a classification guide. Feb 1945.  
57p illus. MI \$1.00 Ph \$4.00.
- OSRD 4750 PBL 12161 (1-903)  
Keller, Fred, and Estes, Catherine W.  
The relative effectiveness of four and seven hours of daily code practice. Feb 1945.  
12p MI \$.50 Ph \$1.00.
- OSRD 4757 PBA 15804 (1-983)  
Rodebush, W. H.  
Statistical considerations in the use of DDT aerosols (Progress report) to January 1, 1945. Mar 1945.  
20p graph, tab. MI \$.50 Ph \$2.00.
- OSRD 4760 PBL 27335 (2-571)  
Cawein, Madison  
Special phototubes and circuit developments. Technical report, Jun 15, 1943-Dec 31, 1944. Jan 1945.  
-PB OSRD P MI PH  
27335 4760 26 \$1.00 \$2.00  
27336 5981 12 1.00 1.00
- OSRD 4762 PBA 24887 (2-395)  
Tissari, O. W.  
Linings for fuel and lubricant containers. Final report. Jan 1945.  
16p tables. MI \$.50 Ph \$2.00.
- OSRD 4764 PBL 16485 (1-1188)  
Tucker, C. W., and others  
Residual stresses in cold-drawn nonferrous alloys (OD-25): an X-ray study, Part V. Final report, Nov 1, 1944-Feb 15, 1945. Mar 1945.  
53p diagrs, graphs. MI \$1.00 Ph \$4.00.
- OSRD 4773 PBL 20220 (1-1500)  
Duwez, P. E., and others  
Behavior of metals under dynamic conditions (N-109): The influence of pure strain rate on the tensile properties of three types of ship plate. Progress report, Dec 11, 1945. Feb 1945.  
78p photos, drawings, tables, diagrs.  
MI \$1.00 Ph \$6.00.
- OSRD 4774 PBL 20218 (1-1488)  
Elmer, D. A., and others  
Behavior of metals under dynamic conditions (N-109): The design of a hydro-pneumatic machine for rapid load tensile testing. Progress report, Dec 23, 1944. Feb 1945.  
27p drawings, diagrs, graphs.  
MI \$.50 Ph \$2.00.
- OSRD 4775 PBL 20217 (1-1577)  
Duwez, P. E., and others  
Behavior of metals under dynamic conditions (N-109): The influence of hardness and type of heat treatment on the static and impact tensile properties of an SAE 4340 steel. Progress report, Dec 26, 1944. Feb 1945.  
28p curves, photos, tables. MI \$.50 Ph \$2.00.
- OSRD 4776 PBL 22317 (1-1494)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of armor plate from Japanese aircraft "Betty." Progress report 157, Jan 19, 1945. Mar 1945.  
5p photos. MI \$.50 Ph \$1.00.
- OSRD 4777 PBL 22318 (2-25)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of Japanese electrical cable. Progress report 156, Jan 24, 1945. Mar 1945.  
12p photos, tables.  
MI \$.50 Ph \$1.00.

## Bibliography

55

- OSRD 4780 PBL 9376 (I-706)  
Erbguth, P., and Aston, J.G.  
Methods of production and calibration of combination vapor pressure and gas dial thermometers, to January 26, 1945.  
19p illus. MI \$.50 Ph \$2.00.
- OSRD 4781 PBL 30754 (2-553)  
Corey, Robert B., and Burkett, Stanley C.  
Equipment and procedure for the preparation of very small batches of rolled sheet powder. Progress report. Mar 1945.  
34p MI \$1.00 Ph \$3.00.
- OSRD 4782 PBA 6012 (I-532)  
Brown, Weldon G., and Boldeback, Edith M.  
Ultraviolet absorption studies on DDT, to March 1, 1945. 1945.  
18p MI \$.50 Ph \$2.00.
- OSRD 4784 PBL 5258 (I-347)  
Hershberg, E. B., and others  
E-19 incendiary bomb. 1945.  
101p illus. Ph \$7.00 MI \$1.50.
- OSRD 4784 PBL 12095 (I-796)  
Hershberg, E. B.  
Supplementary Report on design and development of E-19 incendiary bomb. (For Main Report see PB 6258.) Jun 1945.  
14p illus. MI \$.50 Ph \$1.00.
- OSRD 4786 PBL 20181 (I-1020)  
Hoyle, S.L., and others  
Flash welding of alloy steels for ordnance (OD-86): Part II, Translation of "Production technique and quality of flash-welded joints," by Hans Killiger. Final report, Dec 31, 1944. 1944.  
180p photos, tables, graphs. MI \$2.00 Ph \$10.00.
- OSRD 4787 PBL 51032 (4-973)  
Kissam, Philip  
The harmonization of aircraft remote fire control system. Oct 1945.  
132p photos, diagrs, drawings, graphs. MI \$3.00 Ph \$9.00.
- OSRD 4790 PBL 27552 (2-109)  
Columbia University. Airborne Instruments Laboratory  
A study of short-term fluctuations in the magnetic field of the earth, project MA-120. Feb 1945.  
20p photos, graphs, diagr. MI \$1.00 Ph \$2.00.
- OSRD 4792 PBL 8805 (I-760)  
MacKendrick, J. H., and others  
Mechanical oxygen generating units and related equipment. 1945.  
701p illus. MI \$7.50 Ph \$47.00.
- OSRD 4793 PBL 20223 (2-37)  
Griffis, LeVan, and Horikawa, George H.K.  
Behavior of steel under conditions of multi-axial stress and the effect on this behavior of metallographic structures and chemical composition (X5-307): Progress report, Jan 15, 1944 to Oct 15, 1944. Feb 1945.  
61p photos, drawings. MI \$1.00 Ph \$4.00.
- OSRD 4795 PBL 15215 (I-1443)  
Abrams, M. H., and others  
A project for standardizing submarine phraseology and developing a training
- program in submarine voice communications. Final report Apr-Dec 1944. Feb 1945.  
30p graphs, photos. MI \$.50 Ph \$2.00.
- OSRD 4796 PBA 15618 (I-983)  
LaMer, Victor K., and others  
Toxicity to *Drosophila* (fruit flies) of aerosols of DDT of uniform droplet size in oil of high boiling point: (Progress report) to October 31, 1944. Mar 1945.  
16p graphs, tabs. MI \$.50 Ph \$2.00.
- OSRD 4797 PBL 4643 (I-307)  
Thompson, Norman J., and Kling, Alan L.  
The effect of moisture on ignition and burning characteristics of Douglas fir. 1945.  
15p Ph \$1.00 MI \$.50.
- OSRD 4798 PBA 5913 (I-347)  
Brockman, J., and Lee, T.  
The estimation of chloride by measuring the E.M.F. of a silver, silver chloride, chloride ion half cell for the purpose of estimating H or other toxics. 1945.  
48p illus. Ph \$4.00 MI \$.50.
- OSRD 4800 PBL 23726 (2-544)  
Princeton University. Statistical Research Group  
The statistical sign test. Feb 1945.  
22p tables. MI \$.50 Ph \$2.00.
- OSRD 4806 PBA 40551 (3-551)  
Reuszer, Herbert W.  
Studies on the role of bacteria in the deterioration of cotton duck under tropical conditions. Apr 1945.  
41p tables. MI \$1.00 Ph \$3.00.  
See also PB 11966.
- OSRD 4807 PBA 11966 (I-987)  
Berghoorn, Elmo S.  
Studies on the deterioration of textiles under tropical conditions in the Canal Zone. Apr 1945.  
93p illus. MI \$1.00 Ph \$7.00.
- OSRD 4811 PBL 18335 (I-1270)  
Lindsay, Donald B., and others  
Experiments in training radar operators in visual code reception. Mar 1945.  
19p tables. MI \$.50 Ph \$2.00.
- OSRD 4812 PBL 22319 (I-1573)  
Anthony, H. L.  
Examination of enemy material: Metallurgical examination of captured Japanese aluminum pressure vessels used for the storage of oxygen. Progress report 153, Jan 18, 1945. Mar 1945.  
21p photos, tables. MI \$.50 Ph \$2.00.
- OSRD 4814 PBL 32198 (2-826)  
Kirkwood, John G., and Brinkley, Stuart R., Jr.  
Theory of the propagation of shock waves from explosive sources in air and water. Progress report. Mar 1945.  
39p curves, tables. MI \$1.00 Ph \$3.00.
- OSRD 4819 PBL 19835 (I-1523)  
Lewis, Dartrey, and others  
Corrosion-fatigue failure of aircraft control cables (N-101): Final report, May 1, 1942-Dec 31, 1944. Feb 1945.  
49p photos, curves, tables. MI \$.50 Ph \$4.00.  
See PBs 19812, 19813, 19815, 19821, 19822, 19831, 19832.
- OSRD 4820 PBA 30755 (2-627)  
Harbottle, German, and Noyes, Richard M.  
An improved volumetric bromination procedure for the determination of centralite in smoking powder. Progress report. Mar 1945.  
16p MI \$1.00 Ph \$2.00.
- OSRD 4823 PBL 12071 (I-1010)  
Ladenburg, Rudolf  
Three instruments for measuring muzzle flash intensity. Final report. Feb 1945.  
8p MI \$.50 Ph \$1.00.
- OSRD 4824 PBL 19542 (I-1501)  
Hunter, M. A., and others  
Physical and stress corrosion properties of magnesium alloy sheet (NA-147): Progress report, Jan 15, 1945. Mar 1945.  
78p MI \$1.00 Ph \$6.00.
- OSRD 4825 PBL 31211 (2-653)  
Mattson, R. L., and Almen, J. O.  
Effect of shot blasting on the mechanical properties of steel (NA-119) (OD-177): Part II. Final report, Oct 1, 1943-Sep 30, 1944. Mar 1945.  
134p photom, tables, graphs. MI \$3.00 Ph \$9.00.  
For Part I of final report see PB 19515.
- OSRD 4826 PBL 22320 (I-1582)  
Grenell, L.H., and others  
Examination of enemy material (OD-113; AC-77; N-119). Metallurgical examination of two Japanese Kasai engines, models II and 15. Progress report 155, Jan 24, 1945. Mar 1945.  
59p photos, tables. MI \$1.00 Ph \$4.00.
- OSRD 4827 PBL 22321 (I-1581)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of a Japanese model 82 machine gun. Progress report 152, Jan 12, 1945. Mar 1945.  
17p MI \$.50 Ph \$2.00.
- OSRD 4831 PBL 18336 (I-1271)  
Lindsay, Donald S., and others  
Use of the PPI flash-reading trainer in training navy search-radar operators. Mar 1945.  
12p diagr, photos. MI \$.50 Ph \$1.00.
- OSRD 4832 PBL 19557 (I-1347)  
Gonsamer, M., and others  
Plastic flow of aluminum aircraft sheet under combined loads (Na-149) (Na-150): Part III—Effect of aging at room temperature on the properties of 75S in the circular hydraulic bulge test. Final report, Dec 15, 1944. Mar 1945.  
21p curves. MI \$.50 Ph \$2.00.
- OSRD 4833 PBL 16468 (I-1247)  
Butts, Allison, and Reiber, Paul L., Jr.  
Investigation of the effects of impurities on the ferro-magnetism of non-ferrous alloys (OD-156): Progress report, Oct. 15, 1944-Jan 15, 1945. Mar 1945.  
62p tables, photom, graphs. MI \$1.00 Ph \$5.00.
- OSRD 4834 PBL 5880 (I-476)  
Bergmann, Max, and others  
Progress report on "The chemistry of sulfonium salts related to H," to December 27, 1944. 1945.  
49p MI \$.50 Ph \$4.00.

## Bibliography

- OSRD 4835 PBA 5485 (I-352)  
Fuson, R.C., and others  
An investigation of the structure of the lower polysulfides. 1945.  
42p illus. Ph \$3.00 Mi \$.50.
- OSRD 4836 PBA 5911 (I-471)  
Price, Charles C., and Wiese, Alvin C.  
The quantitative analysis for CK in water by the DB3 procedure. 1945.  
7p illus. Ph \$1.00 Mi \$.50.
- OSRD 4837 PBA 5490 (I-347)  
Mason, C.W., and Delamater, G.B.  
Micro reactions for the identification of fluorophosphates, to 27 February 1945. 1945.  
16p illus. Ph \$1.00 Mi \$.50.
- OSRD 4839 PBL 5487 (I-456)  
Thomas, Lloyd B., and others  
A continuous recording meter for determining concentration of H. 1945.  
50p illus. Ph \$4.00 Mi \$.50.
- OSRD 4840 PBM 5900 (I-471)  
Price, Charles C., and others  
An evaluation of the use of adsorbents in analysis for antimalarial drugs, to February 28, 1945. 1945.  
16p Ph \$2.00 Mi \$.50.
- OSRD 4841 PBA 5483 (I-352)  
Du Vigneaud, Vincent, and others  
Biochemistry of the action of the sulfur-containing vesicants. 1945.  
114p illus. Ph \$8.00 Mi \$.50.
- OSRD 4843 PBA 5863 (I-532)  
Drake, Nathan L.  
The detection of organic fluorine toxics. The use of thiocarbazones as arsenical detectors. 1945.  
106p Ph \$8.00 Mi \$.50.
- OSRD 4844 PBL 8603 (I-603)  
Aston, J.G., and Geissman, T.A.  
The removal of traces of acetylene and other hydrocarbons from air. 1945.  
66p Mi \$1.00 Ph \$5.00.
- OSRD 4845 PBL 9378 (I-760)  
Geissman, T.A.  
Preparation of intermediates for oxygen-carrying chelate complexes, to March 1, 1945. Apr 1945.  
186p Mi \$2.00 Ph \$13.00.
- OSRD 4847 PBL 5500 (I-473)  
Bakelite Corporation  
The value of electrical resistance in studying the protective behavior of organic coatings on mild steel immersed in sea water. 1945.  
37p Ph \$3.00 Mi \$.50.
- OSRD 4852 PBM 5491 (I-496)  
Hogboom, George H., and others  
I. The necrotizing action of certain substances related to mustard gas, H, or to the nitrogen mustard. II. A comparison of the vesicant action exerted on human skin by mustard gas, H, and by mixtures of H with wetting agents or solvents, to March 1, 1945. 1945.  
29p illus.  
Ph \$2.00 Mi \$.50.
- OSRD 4853 PBM 5492 (I-366)  
McMaster, Philip D., and others  
The development of methods for testing the abilities of agents to combat the effects of mustard gas, H, and other vesicants upon the skin, to February, 1945. 1945.  
43p Ph \$3.00 Mi \$.50.
- OSRD 4854 PBM 5493 (I-366)  
McMaster, Philip D., and others  
A search for decontaminating and treatment agents for skin exposed to mustard gas, H, to March, 1945. 1945.  
60p Ph \$4.00 Mi \$.50.
- OSRD 4855 PBM 5882 (I-427)  
Bergmann, Max, and others  
The penetration of vesicant vapors into human skin. 1945.  
41p illus. Ph \$3.00 Mi \$.50.
- OSRD 4856 PBL 27423 (2-436)  
Beth, Richard A.  
Concrete penetration. Mar 1945.  
60p curves, tables. Mi \$2.00 Ph \$4.00.
- OSRD 4861 PBL 18327 (I-1268)  
Beier, D. C., and others  
The selection of fire controlmen (O) rangefinder and radar operators. (Applied Psychology Panel: Selection and training of rangefinder and radar operators. Rept 19.) Mar 1945.  
45p graphs, tables. Mi \$.50 Ph \$3.00.  
See also PB 18323.
- OSRD 4862 PBL 6554 (I-755)  
Comstock and Wescott, Inc.  
The Cox marine electrocoating process. Mar 1945.  
18p Mi \$.50 Ph \$2.00.
- OSRD 4866 PBL 20222 (I-1408)  
Howe, E. D., and others  
History of residual stresses in welded ships (MS-305). Final report. Part I. Ship hulls of Liberty and oil tanker types. Part II. Hogging and sagging tests of oil tankers. Part III. Tests of two Liberty ships at sea. Part IV. Hogging and sagging test of an oil tanker and stress measurements on Type C-4 troopships. Part V. The use of X-rays for stress measurement on board ship. Part VI. Heated panel welding test, S. S. Gaspar de Portola. Part VII. History of deck stresses during the construction of Victory ships. Part VIII. Temperature studies of Liberty, Victory and refrigerated cargo ships. Mar 1945-Feb 1946.  
PB - OSRD Part Mi Ph  
20222 4866 I \$.50 \$3.00  
19943 5262 II 1.00 4.00  
19942 6359 III 1.50 8.00  
19939 6587 IV 1.00 4.00  
19941 6388 V .50 3.00  
19947 6588 VI 1.00 4.00  
19945 6589 VII 1.00 6.00  
19946 6590 VIII 1.00 5.00
- OSRD 4867 PBL 61376 (4-1056)  
DeGarmo E. Paul, and Meriam, J. L.  
Residual stresses in ship welding (MS-304)—Final report. Mar 1945.  
84p photos, drawings, graphs.  
Mi \$2.00 Ph \$6.00.  
See also PBs 33209, 33210, and 33211.
- OSRD 4868 PBL 20215 (I-1498)  
Clark, D. S.  
Behavior of metals under dynamic conditions (MS-109): Final report. Feb 15, 1945. Mar 1945.  
22p Mi \$.50 Ph \$2.00.
- OSRD 4869 PBL 34757 (2-979)  
Kouwenhoven, W. B.  
Development of methods for determining the proper seating of gilding-metal rotating bands on 105 mm. shells in production. Progress report. Mar 1945.  
77p graphs. Mi \$2.00 Ph \$6.00.  
See PBs 11215 and 11216.
- OSRD 4870 PBL 13293 (I-981)  
Satter, G. A.  
An evaluation of the personal inventory for predicting success in parachute school. Mar 1945.  
20p tables. Mi \$.50 Ph \$2.00.
- OSRD 4879 See OSRD 3523.
- OSRD 4880 PBA 5498 (I-828)  
Woodhouse, J. C., and others  
Pilot plant for arsenic trichloride using hydrogen chloride process. Apr 1945.  
86p illus. Mi \$1.00 Ph \$6.00.
- OSRD 4881 PBL 30765 (2-556)  
Lingane, James J.  
Polarographic analysis of primers. Final report. Mar 1945.  
14p graph, photo. Mi \$1.00 Ph \$1.00.  
See also PB 30752.
- OSRD 4883 PBL 34749 (3-85)  
Almy, G. M., and Adams, G. D.  
Three to twenty million volt radiography: The application of the betatron to practical radiography. May 1945.  
36p photos, diagrs, graphs.  
Mi \$1.00 Ph \$3.00.
- OSRD 4888 PBM 5494 (I-431)  
Salzberg, P. L., and others  
Protective and therapeutic agents for war gases—solution of BAL, to January 1, 1945. 1945.  
92p illus. Ph \$7.00 Mi \$1.00.
- OSRD 4891 PBL 31040 (2-608)  
Rouse, Hunter, and others  
Cavitation tests on a systematic series of torpedo heads. Feb. 22-May 31, 1945.  
Graphs.
- | PB    | OSRD | Part | Mi    | Ph     | Micro. | Photo. |
|-------|------|------|-------|--------|--------|--------|
| 31040 | 4891 | I    | \$.50 | \$3.00 | \$1.00 | \$1.00 |
| 31045 | 5059 | II   | 1.00  | 4.00   | 1.00   | 1.00   |
| 31043 | 5056 | III  | 1.50  | 8.00   | 1.00   | 1.00   |
| 31044 | 5057 | IV   | 1.00  | 4.00   | 1.00   | 1.00   |
| 31042 | 5055 | V    | .50   | 3.00   | 1.00   | 1.00   |
| 31041 | 5054 | VI   | 1.00  | 4.00   | 1.00   | 1.00   |
| 31046 | 5253 | VII  | 1.00  | 6.00   | 1.00   | 1.00   |
|       |      | VIII | 1.00  | 5.00   |        |        |
- OSRD 4894 PBL 15619 (I-1061)  
La Mer, Victor K., and others  
Conversion of Besler #374 screening-smoke generator to a Hochberg-La Mer aerosol generator for insecticidal purposes, with supplement on Conversion of Besler M-2 generator, to April 2, 1945. Apr 1945.  
36p diagrs, tables. Mi \$.50 Ph \$3.00.

## Bibliography

57

- OSRD 4895 PBA 15641 (I-1062)  
Pease, Robert W.  
Gel-type hopcalite and some granular reagents for carbon monoxide. Progress report to December 31, 1944. Apr 1945.  
26p tabs. MI \$.50 Ph \$2.00.
- OSRD 4896 PBL 15624 (I-1294)  
Pease, Robert, and Oranyo, Charles  
Results of canister tests against carbon monoxide to December 31, 1944. Apr 1945.  
9p tables. MI \$.50 Ph \$1.00.
- OSRD 4897 PBA 15622 (I-986)  
Pease, Robert W., and McLean, John H.  
Further investigations of drying agents. (Progress report) to December 31, 1944. Apr 1945.  
16p tabs. MI \$.50 Ph \$2.00.
- OSRD 4898 PBA 15623 (I-986)  
Pease, Robert W.  
Protection against carbon monoxide. (Progress report) to December 31, 1944. Apr 1945.  
9p MI \$.50 Ph \$1.00.
- OSRD 4899 PBL 18874 (I-1509)  
Halverson, R. R.  
The effect of air burst on the blast from bombs and small charges. II. Analysis of experimental results. Apr 1945.  
82p curves, photos, tables. MI \$1.00.  
Ph \$5.00.
- OSRD 4900 PBL 16740 (I-1322)  
Hess, W. F., and others  
Evaluation of factors affecting crack sensitivity of welded joints. Part II. Measurement of stresses at the threshold of cracking of first pass weld metal. Final report. Apr 1945.  
40p tables, diagrs, photos. MI \$.50.  
Ph \$3.00.
- OSRD 4901 PBL 15617 (I-1106)  
LaMer, Victor K., and Hochberg, Seymour  
The Hochberg-LaMer aerosol generator, to Oct 31, 1944. Apr 1945.  
29p diagrs, graphs. MI \$.50 Ph \$2.00.
- OSRD 4904 PBA 32208 (2-857)  
LaMer, Victor K., and others  
The optical characterization of any aerosol in the laboratory or field. The production of aerosols from powdered solid materials. Final report. Apr 1945.  
36p graphs. MI \$1.00 Ph \$3.00.
- OSRD 4905 PBL 34785 (2-904)  
Rosser, J. Barkley, and others  
Tables of functions related to the Fresnel Integrals. Mar 1945.  
35p tables. MI \$1.00 Ph \$3.00.
- OSRD 4911 PBL 12157 (I-902)  
Keller, Fred S.  
Memorandum on the code-voice method of teaching International Morse code. Apr 1945.  
10p MI \$.50 Ph \$1.00.
- OSRD 4913 PBL 22322 (I-1580)  
Bartholomew, E. L. Jr., and others  
Examination of enemy material: Metallurgical investigation of German 75 mm. gun tubes. Progress report 105, Feb 28, 1945. Apr 1945.  
48p drawings, graphs, tables, photos. MI \$.50 Ph \$4.00.
- OSRD 4914 PBL 22323 (I-1404)  
Granell, L. H., and others  
Examination of enemy material: Metallurgical examination of armor plate from Japanese aircraft "Lily 2." Progress report 160, Feb 28, 1945. Apr 1945.  
7p photos, tables. MI \$.50 Ph \$1.00.
- OSRD 4915 PBL 22324 (I-1571)  
Granell, L. H., and others  
Examination of enemy material: Metallurgical examination of German MP-43/1 7.92 mm. machine pistol. Progress report 162, Mar 3, 1945. Apr 1945.  
8p photos, tables. MI \$.50 Ph \$1.00.
- OSRD 4916 PBL 22325 (I-1581)  
Granell, L. H., and others  
Examination of enemy material: Metallurgical examination of German tank track links and pins. Progress report 163, Feb 26, 1945. Apr 1945.  
9p tables, photos. MI \$.50 Ph \$1.00.
- OSRD 4917 PBL 22327 (I-1532)  
Granell, L. H., and others  
Examination of enemy material: Metallurgical examination of Japanese 30 mm. N.E. incendiary and N.E. tracer ammunition. Progress report 164, Mar 14, 1945. Apr 1945.  
7p photos, tables. MI \$.50 Ph \$1.00.
- OSRD 4921 PBL 19651 (I-1350)  
Shiffman, Max, and Spencer, Donald C.  
The force of impact on a sphere striking a water surface. Approximation by the flow about a lens. Feb 1945.  
56p diagrs, graphs. MI \$1.00 Ph \$4.00.
- OSRD 4925 PBL 34123 (3-46)  
U. S. National Defense Research Commission  
Studies of the design of opaque reticles for stereoscopic range and height finders. Mar 1945.  
20p drawings, tables. MI \$5.00 Ph \$14.00.
- OSRD 4928 PBL 6555 (I-412)  
Brown University, Applied Mathematics Group.  
An electrical analogue to the spring hammer box. 1945.  
54p Ph \$4.00 MI \$1.00.
- OSRD 4931 PBL 12058 (I-781)  
Hartley, Eugene L., Jones, Dorothy B.  
Final summary of research on the use of battle noise equipment. Apr 1945.  
21p MI \$.50 Ph \$2.00.
- OSRD 4933 PBL 27352 (2-573)  
Hippel, Arthur von  
Research on thallous sulfide photoconductive cells. Apr 1945.  
113p diagrs, graphs, tables, drawings. MI \$3.00 Ph \$8.00.
- OSRD 4937 PBL 34758 (3-171)  
Heim, H. J., and Webb, R. C.  
Design, construction and operation of four unit cathode ray oscilloscopes. Jun 1945.  
124p diagrs, photos. MI \$3.00 Ph \$8.00.
- OSRD 4938 See OSRD 4936.
- OSRD 4940 PBL 19575 (I-1411)  
Sachs, George, and others  
Correlation of information available on the fabrication of aluminum alloys (WA-126). Final report. Section V, Formability of aluminum
- alloys for use in military aircraft: Part IV, Fundamentals of pure bending of an ideal plastic metal under conditions of plane stress. Apr 1945.  
36p graphs. MI \$.50 Ph \$3.00.
- OSRD 4955 PBL 19828 (I-1578)  
Hess, W. F., and others  
Spot-welding of magnesium alloys: Part I - The surface treatment of magnesium alloy sheet for spot-welding. Final report, Aug 1944. Apr 1945.  
101p curves, tables. MI \$1.50 Ph \$7.00.
- OSRD 4956 PBL 19827 (2-37)  
Hess, W. F., and others  
Spot-welding of magnesium alloys: Part II - Spot welding characteristics of chemically cleaned magnesium alloy sheet. Final report, Aug 1944. Apr 1945.  
122p curves. MI \$1.50 Ph \$9.00.
- OSRD 4957 PBL 5221 (I-1389)  
Herzog, Gerhard  
Measurements on propeller blades. Dec 1944.  
36p photos, drawings. MI \$.50 Ph \$3.00.
- OSRD 4963 PBA 50884 (5-475)  
Penner, S., and Sherman, S.  
Diffusion of nitroglycerin in wrapped powder grains. Weekly progress report, Supp. II, Jun 5, 1945. n.d.  
35p MI \$1.00 Ph \$3.00.
- OSRD 4964 PBL 50883 (4-387)  
Golden, S., and Lathrop, G.  
Apparatus for the recording of pressure vs. Pdt. Weekly progress report, Supp. I, Jun 5, 1945.  
28p diagrs, photos. MI \$1.00 Ph \$2.00.
- OSRD 4969 PBL 33360 (2-748)  
McLeod, John H.  
Light weight optical mirrors using foamplast. Final report. Apr 1945.  
8p MI \$1.00 Ph \$1.00.
- OSRD 4973 PBL 4443 (I-467)  
Wesley, S. M.; and others  
Training manual for the Welln gravity davits. 1945.  
30p illus. Ph \$2.00 MI \$.50.
- OSRD 4980 PBL 4195 (I-439)  
Moore, T. V., and Camp, T. R.  
Development of mechanized flame thrower, El-SRI-13R2 in M4A1 tank. 1945.  
127p illus. Ph \$9.00 MI \$1.50.
- OSRD 4981 PBL 4206 (I-389)  
Agoston, G. A., and Klenn, W. A.  
Factors governing the performance of flame throwers. 1945.  
90p illus. Ph \$8.00 MI \$1.00.
- OSRD 4982 PBL 22326 (I-1581)  
Granell, L. H., and others  
Examination of enemy material: Metallurgical examination of Japanese Sakae-12 engine No. 124076. Progress report 158, Feb 12, 1945. Apr 1945.  
66p photos, tables. MI \$1.00 Ph \$4.00.
- OSRD 4983 PBL 4625 (I-435)  
Dawson, R. D., and others  
Mechanized flame thrower Model I-2. 1945.  
4p blueprints. Ph \$4.00  
MI \$1.00.

## Bibliography

- OSRD 4984 PBM 5873 (I-496)  
Cori, Carl F., and others  
Effects of methyl fluoroacetate on isolated tissues and enzyme systems, to March 20, 1945.  
1945.  
32p Ph \$3.00 MI \$.50.
- OSRD 4986 PBL 63636 (5-694)  
U. S. National Bureau of Standards and Carnegie Institution of Washington, Geophysical Laboratory  
Firings in 3-inch gun at David W. Taylor Model Basin, Oct 1943 to May 1944. Second report. May 1945.  
22p photos, diagrs, graphs, tables. MI \$.50 Ph \$15.00.
- OSRD 4988 PBL 32226 (2-648)  
Stanbury, George R., and others  
Studies in wood moisture content: Part A. Moisture content of wood in houses in Key West, Florida, Dec 1944-Feb 1945, by George R. Stanbury and Raymond H. Ewell; Part B. Laboratory studies of equilibrium moisture content of wood, by Richard F. Messing. Apr 1945.  
45p photos, tables, graphs. MI \$1.00 Ph \$3.00.
- OSRD 4989 PBA 5879 (I-480)  
Price, Charles C., and Bullitt, Orville H., Jr.  
The concentration of the odorous principle of water-washed Levantine mustard. The preparation of 2-chloroethyl sulfenyl chloride, to February 28, 1945. 1945.  
15p Ph \$1.00 MI \$.50
- OSRD 4995 PBL 20210 (I-1575)  
Berry, J. M., and others  
Investigation of boron in armor plate (OD-87): Endurance and other properties of some boron-containing carbon steels and HE 9400 type steels. Final report, Feb 15, 1945. Apr 1945.  
34p curves, diagrs, tables. MI \$.50 Ph \$3.00.
- OSRD 4996 PBL 23778 (2-342)  
Stibitz, George R.  
Relay computers. Feb 1945.  
86p MI \$1.00 Ph \$.50.
- OSRD 4997 PBL 34756 (3-102)  
Fleming, J. A., and McNish, A. G.  
Final report on contract NDCrc-187 and supplements. Apr 1945. May 1945.  
12p MI \$1.00 Ph \$1.00.
- OSRD 5002 PBM 5902 (I-497)  
Rotariu, George J., and others  
The toxicity and pathology of phosgene oxime (dichloroformoxime), to March 31, 1945. 1945.  
7p Ph \$1.00 MI \$.50.
- OSRD 5003 PBA 5872 (I-481)  
Shriner, R. L., and others  
N-alkyl carbamates of 4-substituted-3, 5-dimethylphenols, to June 1, 1945. 1945.  
28p Ph \$2.00 MI \$.50.
- OSRD 5004 PBL 19802 (2-29)  
Stewart, J. R.  
Selective gas analyzers. May 1945.  
30p charts, diagrs, drawings. MI \$.50 Ph \$2.00.
- OSRD 5005 PBL 22328 (I-1581)  
Grenell, L. H., and others
- Examination of enemy material: Metallurgical examination of a Japanese model .89 7.7 mm aircraft machine gun. Progress report 161, Mar 16, 1945. Apr 1945.  
15p MI \$.50 Ph \$1.00.
- OSRD 5010 PBL 16449 (I-1200)  
Pittsburgh University  
Tropical testing. Mar 1945.  
17p tables. MI \$.50 Ph \$2.00.
- OSRD 5012 PBL 34755 (3-201)  
Schilling, Harold K.  
Ultrasonic signalling. Mar 1945.  
285p charts, drawings, graphs, photos. MI \$6.00 Ph \$19.00.
- OSRD 5014 PBL 19574 (I-1503)  
Sachs, George, and others  
Correlation of information available on the fabrication aluminum alloys (Na-126): Final report. Section V, Formability of aluminum alloys for use in military aircraft: Part V, Simple bending of rectangular shapes by means of dies. Apr 1945.  
60p tables, photos. MI \$1.00 Ph \$4.00.
- OSRD 5016 PBL 13100 (I-958)  
Wright, W. F., and others  
True air-mileage devices. Apr 1945.  
12p illus. MI \$.50 Ph \$1.00.
- OSRD 5018 PBL 16746 (I-1112)  
Mehl, Robert F., and Grobe, Arthur H.  
Acceptance tests for plain carbon steel gun forgings and other ordnance forgings (OD-114), Final report, May 1943-Aug 1944. May 1945.  
132p photos, tabs, graphs. MI \$.150 Ph \$9.00.
- OSRD 5019 PBL 16741 (I-1027)  
Schaefer, Raymond M., and others  
Experimental production of pilot static and centrifugal castings for the Armed Services: Part I, Centrifugally cast composite grinding rolls. Final report. May 1945.  
34p illus. MI \$.50 Ph \$2.00.
- OSRD 5020 PBL 22329 (I-1590)  
Heussner, C. E., and others  
Examination of enemy material: Metallurgical examination of landing wheel and strut, wing sections, and components from Japanese aircraft "Frances." Progress report 165, Mar 15, 1945. May 1945.  
36p photos, tables. MI \$.50 Ph \$3.00.
- OSRD 5021 PBL 22330 (I-1522)  
Heussner, C. E., and others  
Examination of enemy material: Metallurgical examination of two Japanese gasoline tanks from a "Judy" type aircraft wing. Progress report 167, Mar 20, 1945. May 1945.  
11p tables, photos. MI \$.50 Ph \$1.00.
- OSRD 5023 PBL 4639 (I-442)  
Thompson, Norman J., and Dakin, Morrill  
Comparative incendiary effectiveness of the E-19 and M-50 incendiary bombs. 1945.  
22p MI \$.50 Ph \$2.00.
- OSRD 5026 PBM 5871 (I-430)  
McMaster, Philip D., and Hogeboom, George H.  
Changes in the circulation and in the permeability of vessels within and about mustard gas and Lewisite lesions of rabbit skin, to April, 1945. 1945.  
5ip illus. Ph \$4.00 MI \$.50.
- OSRD 5027 PBM 5877 (I-560)  
McMaster, Philip D., and others  
The inhibition of vesiculation in mustard gas, H, lesions of human skin by BAL, to March, 1945. 1945.  
33p illus. Ph \$3.00 MI \$.50.
- OSRD 5039 PBL 4228 (I-305)  
Winslow, G. H., and Bessey, M. H.  
High-speed compression testing of copper crusher cylinders and spheres, II. Final report. 1945.  
57p illus. Ph \$4.00 MI \$1.00.
- OSRD 5040 See OSRD 3523.
- OSRD 5044 PBL 16764 (I-1027)  
Parke, Robert M.  
Heat-resisting metals for gas turbine parts (N-102): chromium-base alloys. Progress report, Feb. 26, 1945. May 1945.  
7ip illus. MI \$.100 Ph \$5.00.
- OSRD 5048 PBL 22331 (I-1505)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of a German 7.62 cm. A.P. w/tungsten carbide shot case (Russian) shot. Progress report 169, Mar 31, 1945. May 1945.  
9p photos. MI \$.50 Ph \$1.00.
- OSRD 5049 PBL 22332 (I-1571)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of a German 88 mm. A.P. H.E. C.B.C. Pak 43 shell. Progress report 168, Mar 31, 1945. May 1945.  
18p charts, photos. MI \$.50 Ph \$2.00.
- OSRD 5051 PBL 27553 (2-108)  
Columbia University. Airborne Instruments Laboratory  
Magnetometer suspensions. May 1945.  
28p drawings, graphs, tables. MI \$1.00 Ph \$2.00.
- OSRD 5052 PBL 15845 (I-1356)  
Mehl, R. F., and others  
Improvement in gun steel ingot practice (OD-34-3): Classification of bore defects in seamless gun tubes. Progress report, Mar 20, 1944. Mar 1944.  
2ip charts. MI \$.50 Ph \$2.00.
- OSRD 5053 PBL 5225 (I-349)  
Redfield, Alfred C.  
Interaction of antifouling paints and steel. 1945.  
50p illus. Ph \$4.00 MI \$.50.
- OSRD 5054 See OSRD 4891.
- OSRD 5055 See OSRD 4891.
- OSRD 5056 See OSRD 4891.
- OSRD 5057 See OSRD 4891.
- OSRD 5059 See OSRD 4891.
- OSRD 5060 PBL 20215 (I-1503)  
Rosenthal, Daniel, and others  
History of residual stresses in welded ships (MS-305): The use of X-rays for the determination of stresses in ship plates. Progress report. May 1945.  
38p photos, diagrs, graphs, drawings. MI \$.50 Ph \$3.00.

- OSRD 5062 PBL 20202 (I-1344)  
Banta, H. N., and others  
Investigation of metallurgical quality of  
steels used for hull construction (MS-25).  
Progress report, Feb 15, 1945. May 1945.  
57p tables, maps, photomicrographs  
MI \$1.00 Ph \$4.00.  
See also PBs 19935, 19937, 19938.
- OSRD 5064 PBL 16419 (I-1013)  
Grinstead, C. E.  
Summary report on the design and development  
of the inductor compass. May 1945.  
56p photos, diagrs, maps. MI \$1.00 Ph \$4.00.
- OSRD 5067 PBL 28575 (3-561)  
Almy, G. H., and Adams, G. D.  
Three to twenty million volt radiography.  
Final report. Jun 1945.  
9ip photos, drawings, diagrs, charts.  
MI \$2.00 Ph \$7.00.
- OSRD 5074 PBL 58198 (4-946)  
Thurs, A. L.  
Underwater sonic loudspeaker. Progress  
report, Apr 24, 1945.  
10p photos, diagrs, tables. MI \$1.00  
Ph \$1.00.
- OSRD 5075 PBA 5894 (I-348)  
Swift, E. K., and Niemann, Carl  
Appendices to "A system for the ultimate  
analysis of chemical warfare agents," to May 4,  
1945. 1945.  
65p illus. MI \$1.00 Ph \$4.00.
- OSRD 5077 PBA 5895 (I-478)  
Gould, C. W., and others  
A system for the separation and purification  
of decigram quantities of chemical warfare  
agents. 1945.  
80p illus. Ph \$8.00 MI \$1.00.
- OSRD 5078 PBA 5896 (I-532)  
Bennett, Edward, and others  
Qualitative tests for certain acidic ele-  
ments in organic compounds, to May 4, 1945.  
1945.  
37p illus. Ph \$3.00 MI \$.80.
- OSRD 5090 PBL 4442 (I-465)  
Conner, B. J., and others  
APA engineering course curriculum—units for  
balance of crew training. 1945.  
15p Ph \$1.00 MI \$.50.
- OSRD 5098 PBL 5228 (I-373)  
Greenberg, H. J.  
Gun equilibrators II. 1945.  
5ip illus. Ph \$4.00 MI \$1.00.
- OSRD 5099 PBL 27353 (2-573)  
Hawlett, C. W., and others  
Thallous sulfide photoconductive cell.  
Final report Feb 1945.  
165p photos, graphs, tables, diagrs, draw-  
ings. MI \$4.00 Ph \$11.00.
- OSRD 5101 PBL 15888 (I-1253)  
Rimpel, P. J., and others  
Development of improved electrode coatings  
(OD-36-2). Progress report, Jul 15, 1944 to  
Jan 15, 1945. May 1945.  
105p diagrs, photos. MI \$1.50 Ph \$8.00.
- OSRD 5104 PBL 22333 (I-1507)  
Grinstead, C. E., and others
- Examination of enemy material (OD-113;  
AC-77; N-119): Metallurgical examination of a  
Japanese 57 mm tank gun, model 97. Progress  
report I72, Apr 15, 1945. May 1945.  
30p drawings, photos, tables. MI \$.50 Ph \$2.00.
- OSRD 5105 PBL 43049 (3-709)  
Hendricks, Paul S.  
Conversion unit comparisons. Final report,  
Jan 1, 1944-Mar 15, 1945. Mar 1945.  
80p photos, drawings. MI \$2.00 Ph \$8.00.
- OSRD 5107 PBL 22334 (I-1523)  
Haussner, C. E., and others  
Examination of enemy material: Metallur-  
gical examination of Japanese aircraft "Irving"  
airframe. Progress report I71, Apr 12, 1945.  
May 1945.  
10p photos, tables. MI \$.50 Ph \$1.00.
- OSRD 5108 PBL 22335 (I-1572)  
Grinell, L. H., and others  
Examination of enemy material: Metallur-  
gical examination of armor plate from Japanese  
aircraft "Frank." Progress report I74, Apr 24,  
1945. May 1945.  
6p photo, tables. MI \$.50 Ph \$1.00.
- OSRD 5109 PBL 22336 (I-1523)  
Grinell, L. H., and others  
Examination of enemy material: Metallur-  
gical examination of a Japanese Kinsel-53 air-  
craft engine. Progress report I70, Apr 14,  
1945. May 1945.  
48p photos, tables. MI \$.50 Ph \$4.00.
- OSRD 5110 PBL 22391 (I-1565)  
Bartholomew, E. L., Jr., and others  
Examination of enemy material: (OD-113;  
(AC-77) (N-119). Metallurgical investigation  
of German 88 mm. guns. Progress report I08,  
Apr 15, 1945. May 1945.  
43p curves, drawings, photos. MI \$.80  
Ph \$3.00.
- OSRD 5118 PBL 19825 (I-1580)  
Zickrick, Lyall  
Bi-metallic copper-steel driving bands for  
projectiles (HO-150): Part III. Final report,  
Sep 15, 1944. May 1945.  
Ep MI \$.50 Ph \$1.00.
- OSRD 5120 PBL 32225 (2-659)  
Keavill, Charles S., and Stanbury, G. R.  
Incendiary tests in experimental Japanese  
room. Progress report. May 1945.  
20p photos, drawings, graphs. MI \$1.00  
Ph \$2.00.
- OSRD 5121 PBL 4441 (I-466)  
Organist, M. E., Jr., and others  
Instructor's manual for stage II Auxiliary  
ships ABM divisions combined. 1944.  
14p Ph \$1.00 MI \$.50.
- OSRD 5122 PBL 22849 (I-1802)  
Shaw, W. A.  
Development of ear wardens type Y-SIR.  
Jul 1945.  
72p photos, graphs, drawings. MI \$1.00  
Ph \$.50.
- OSRD 5123 PBL 22840 (2-153)  
Forbes, T. M., and others  
Flying by auditory reference ("Flybar").  
Jun 1945.  
9ip photos, diagrs, graphs. MI \$1.00  
Ph \$.70.
- OSRD 5125 Standard Oil Development Co.  
Flame thrower, mechanized, E7-7, in light  
tank, M5A1. 1945.  
112p illus. Ph \$8.00 MI \$1.50.
- OSRD 5126 Standard Oil Development Co.  
Flame thrower, mechanized, E12-7RI installed  
in medium tank M4A1. 1945.  
160p illus. Ph \$11.00 MI \$2.00.
- OSRD 5127 Standard Oil Development Company  
Service unit, mechanized flame thrower, EB  
for use with Flame thrower, mechanized,  
E12-7RI. 1945.  
185p illus. MI \$2.00 Ph \$13.00.
- OSRD 5129 Jones and Lamson Machine Co.,  
Springfield, Vt.  
Thread gage development. Final report. n.d.  
84p drawings, photos. MI \$1.00 Ph \$6.00.  
See also PB 20829 and PB 20288.
- OSRD 5133 PBL 22382 (I-1572)  
Grinell, L. H., and others  
Examination of enemy material (OD-113;  
AC-77; N-119): Metallurgical examination of  
German tank armor plate. Progress report I80,  
May 1945.  
11p tables. MI \$.50 Ph \$1.00.
- OSRD 5134 PBL 22383 (I-1508)  
Grinell, L. H., and others  
Examination of enemy material (OD-113;  
AC-77; N-119): Metallurgical examination of  
two Japanese Derilkon-type 20 mm. aircraft  
machine guns of 1944. Progress report I73,  
Apr 20, 1945. May 1945.  
33p photos, tables. MI \$.50 Ph \$2.00.
- OSRD 5135 PBL 22395 (I-1574)  
Grinell, L. H., and others  
Examination of enemy material (OD-113;  
(AC-77) (N-119): Metallurgical examination of  
5-inch Japanese naval projectile. Progress  
report I76, Apr 20, 1945. May 1945.  
6p photo, table. MI \$.50 Ph \$1.00.
- OSRD 5136 PBL 22394 (I-1581)  
Grinell, L. H., and others  
Examination of enemy material (OD-113;  
AC-77; N-119): Metallurgical examination of a  
German 75 mm. Kw. K 42 AP-HE-C & BC projectile  
and cartridge case. Progress report I75, Apr  
15, 1945. May 1945.  
13p drawings, photos. MI \$.50 Ph \$1.00.
- OSRD 5137 PBL 33255 (2-892)  
Brinkley, Stuart R., Jr., and Kirkwood, John G.  
Tables and graphs of the theoretical peak  
pressures, energies, and positive impulses of  
blast waves in air. May 1945.  
45p tables, graphs. MI \$1.00 Ph \$3.00.
- OSRD 5140 PBL 15813 (I-918)  
Ruch, Floyd L.  
Selection and training of cargo handling  
teams for combat laden vessels: Report No. 5.  
Final report in summary of work on the selec-  
tion and training of cargo handling teams for  
combat laden vessels. May 1945.  
15p MI \$.50 Ph \$1.00.

## Bibliography

- OSRD 5141 PBL 19789 (I-1408)  
Lukens, Hiram S.  
Flatware for army use (DHC-21): Final report Part I, from Jan 25, 1944 to Jan 26, 1945. May 1945.  
18p Mi \$.50 Ph \$2.00.
- OSRD 5143 PBL 28528 (2-589)  
Evans, C. D.  
Development of armor welding electrodes (OD-36-2): Effect of time and temperature of aging treatments on the physical properties of HRC-2A weld metal. Advisory report. Jun 1945.  
19p curves, drawings, photos. Mi \$1.00 Ph \$2.00.
- OSRD 5145 PBL 13307 (I-824)  
Peterson, D.A.  
Classification data available to ships' officers. May 1946.  
10p Mi \$.50 Ph \$1.00.
- OSRD 5146 PBM 5864 (I-495)  
Cohen, Barnett, and others  
Final report under Contract ODMR-532 (and summarization of NDRC work, John Hopkins University, School of Medicine). 1945.  
22p Mi \$.50 Ph \$2.00.
- OSRD 5147 PBL 5862 (I-479)  
Herriot, Roger M., and Northrop, John H.  
Volatile impurities of Levinstein N. 1945.  
17p Ph \$2.00.  
Mi \$.50.
- OSRD 5150 PBL 8343 (I-606)  
Matthew, C.J.  
Development of test unit for production of oxygen by a regenerative chemical, to March 30, 1945. 1945.  
23p Mi \$.50 Ph \$2.00.
- OSRD 5151 PBL 8341 (I-751)  
Wheeler, T.L., and McMahon, H.O.  
Instrument for measuring water-vapor content in aviator's oxygen: Final report to April 11, 1945. 1945.  
30p Mi \$.50 Ph \$2.00.
- OSRD 5152 PBL 8342 (I-558)  
Wheeler, T.L., and Latham, A., Jr.  
Liquid oxygen pump and vaporizer. 1945.  
40p illus. Mi \$.50 Ph \$3.00.
- OSRD 5153 PBL 8604 (I-539)  
McCabe, W.L.  
Monthly progress report: Central Engineering Laboratory, National Defense Research Committee. Covering period: April 1 to 30, 1945. 1945.  
46p Mi \$.50 Ph \$4.00.
- OSRD 5154 PBL 8339 (I-539)  
Lobo, W. E., and Bockius, C.  
Report oxygen plant development employing regenerative chemicals. 1945.  
44p Mi \$.50 Ph \$3.00.
- OSRD 5158 See OSRD 3136.
- OSRD 5159 PBL 33355 (2-746)  
Bausch and Lomb Optical Co., Rochester, N.Y.  
Superposed image rangefinder. Final report. Jun 1945.  
13p drawings, photos. Mi \$1.00 Ph \$1.00.
- OSRD 5165 PBL 11208 (I-700)  
Caywood, W.  
Model study of the Rotaflail: Final report. Jun 1945.  
33p illus. Mi \$.50 Ph \$3.00.
- OSRD 5166 PBL 19804 (2-191)  
Caywood, W.  
An acoustic volume-measuring device. May 1945.  
26p graph, photo, diagrs. Mi \$.50 Ph \$2.00.
- OSRD 5168 PBL 12158 (I-902)  
Herbert, Marvin J., and Keller, Fred S.  
The use of hand-sent clear text as practice material in learning to receive Morse code. Jun 1945.  
10p Mi \$.50 Ph \$1.00.
- OSRD 5169 PBM 5876 (I-560)  
Renshaw, Birdseye  
Observations on the role of water in the susceptibility of human skin to vesicant vapors, to April 12, 1945. 1945.  
36p illus. Ph \$3.00 Mi \$.50.
- OSRD 5171 PBL 23705 (2-469)  
Bargmann, Valentine  
On nearly glancing reflection of shocks. Mar 1945.  
55p figs. Mi \$1.00 Ph \$4.00.
- OSRD 5173 PBL 23698 (2-483)  
Brillouin, Leon  
Oscillations in a plane one-anode magnetron. May 1945.  
92p graphs. Mi \$1.00 Ph \$7.00.
- OSRD 5174 PBL 12032 (I-767)  
Mason, Harry M.  
Phonetic characteristics related to intelligibility of words in noise; sounds correctly understood in misunderstood words. Jun 1945.  
21p illus. Mi \$.50 Ph \$2.00.
- OSRD 5175 PBL 68914 (5-788)  
Beth, R. A., and Schaefer, E. J.  
An electromagnetic method for measuring projectile velocity during penetration. Jun. 1945.  
34p graphs, drawings. Mi \$1.00 Ph \$3.00.
- OSRD 5177 PBL 6693 (I-452)  
Bausch & Lomb Optical Co.  
Gradient density sun glasses. Final Report. 1945.  
14p illus. Mi \$.50 Ph \$1.00.
- OSRD 5180 PBM 5875 (I-561)  
Smith, Homer W., and others  
The comparative systemic effects of mustard and the nitrogen mustards (HN1, HN2, HN3) in rats, to May 1, 1945. 1945.  
20p Mi \$.50 Ph \$2.00.
- OSRD 5181 PBL 5881 (I-485)  
Bergmann, Max, and others  
The penetration of vesicant vapors into human skin (Supplement OSRD Report 4859, to May 15, 1945. 1945.  
7p Ph \$1.00 Mi \$.50.
- OSRD 5196 PBL 19648 (I-1413)  
U.S. National Defense Research Commission  
Statistical analysis of effect of chemical composition on stress-rupture properties of a group of alloys tested at M.I.T. May 1945.  
76p graphs, tables. Mi \$1.00 Ph \$8.00.
- OSRD 5197 PBL 12155 (I-1444)  
Levin, M.M.  
A point score method for evaluating naval personnel. Jun 1945.  
41p Mi \$.50 Ph \$3.00.
- OSRD 5198 PBL 12033 (I-982)  
Smith, Kinsley R., and others  
The effectiveness of classification data in predicting billet performance in training in the amphibious force. Jun 1945.  
163p tables. Mi \$2.00 Ph \$11.00.
- OSRD 5199 PBL 22009 (I-1592)  
Grenell, L.H., and others  
Examination of enemy material: (OD-113) (AC-77) (M-119). Metallurgical examination of Japanese Homare-II aircraft engine No. 11515. Progress report 178, Apr 28, 1945. Jun 1945.  
81p graphs, photos, tables. Mi \$1.00 Ph \$6.00.
- OSRD 5200 PBL 22010 (I-1590)  
Grenell, L. H., and others  
Examination of enemy material: (OD-113) (AC-77) (M-119). Metallurgical examination of German and Japanese bushings and oil lines. Progress report 185, Apr 29, 1945. Jun 1945.  
69p photos, tables. Mi \$.50 Ph \$1.00.
- OSRD 5203 PBL 12029 (I-904)  
Miller, D.R.  
Final report in summary of work on the selection of L.C.V.P. coxswains. Jun 1945.  
12p Mi \$.50 Ph \$1.00.
- OSRD 5204 PBL 33256 (3-404)  
Winckler, J.R., and others  
Study of shock waves by interferometry. Jun 1945.  
72p photos, tables, diagrs, graphs. Mi \$2.00 Ph \$5.00.
- OSRD 5206 PBL 31024 (3-52)  
Hoff, H. B., and others  
Ambient noise survey, Miami area and the east coast of the United States. Completion report. May 1945.  
143p photom, charts, graphs. Mi \$1.00 Ph \$3.00.
- OSRD 5207 PBL 31020 (2-990)  
Hoff, H.B., and others  
Oceanographic studies. Summary report. May 1945.  
29p graphs, map. Mi \$1.00 Ph \$2.00.
- OSRD 5209 PBL 4223 (I-329)  
Wheeler, T. L., and others  
E-16 always fuse for the AN-M69 incendiary bomb. 1945.  
12p illus. Mi \$.50 Ph \$1.00.
- OSRD 5214 PBL 8600 (I-759)  
Aston, J.C.  
Air rectification. 1945.  
8p Mi \$.50 Ph \$1.00.
- OSRD 5224 PBL 30767 (2-608)  
Rice, Oscar K.  
The theory of the burning of double-base rocket powders. Progress report. Jun 1945.  
98p Mi \$2.00 Ph \$7.00.  
See also PB 30768.

## Bibliography

61

- OSRD 5225 PBL 21120 (2-78)  
Talkes, Maria  
Solar distiller for life rafts: Final report, May 1945. Jun 1945.  
35p photos, diagrs, graphs. MI \$1.50 Ph \$3.00.
- OSRD 5226 PBL 16484 (I-1113)  
Tucker, C. M., and others  
Residual stresses in cold-drawn non-ferrous alloys (OD-26): an X-ray study, Part VI; Final report, Feb 16, 1945-May 31, 1945. Jun 1945.  
53p diagrs. MI \$1.00 Ph \$4.00.
- OSRD 5227 PBL 22008 (I-1575)  
Grenell, L. H., and others  
Examination of enemy material: (OD-113) (AC-77) (N-119). Metallurgical examination of Japanese 47 mm. antitank gun. Progress report 181, May 1, 1945. Jun 1945.  
38p photos, tables. MI \$1.50 Ph \$3.00.
- OSRD 5228 PBL 22007 (2-46)  
Grenell, L. H., and others  
Examination of enemy material: (OD-113) (AC-77) (N-119). Metallurgical examination of a Japanese aircraft 20 mm. "Browning type" machine gun. Progress report 182, May 1, 1945. Jun 1945.  
24p photos. MI \$1.50 Ph \$2.00.
- OSRD 5229 PBL 22006 (I-1490)  
Grenell, L. H., and others  
Examination of enemy material: (OD-113) (AC-77) (N-119). Metallurgical examination of small gun barrels. Progress report 177, Apr 23, 1945. Jun 1945.  
8p tables, photos. MI \$1.00.
- OSRD 5230 PBL 22005 (I-1490)  
Grenell, L. H., and others  
Examination of enemy material: (OD-113) (AC-77) (N-119). Metallurgical examination of tungsten carbide powder and compacts. Progress report 187, May 1, 1945. Jun 1945.  
8p tables, photos. MI \$1.00.
- OSRD 5231 PBL 58197 (4-1174)  
Gibson, R. E.  
Description and instructions for the use of jet-assisted take-off unit, model SAE-1000-HS. Jun 1945.  
23p photos, diagrs, graphs. MI \$1.00 Ph \$2.00.
- OSRD 5233 PBL 16486 (I-1042)  
Barkan, J. A.  
Completion report. Periscope trainer. May 1945.  
35p photos. MI \$1.50 Ph \$3.00.
- OSRD 5238 PBL 32211 (2-840)  
Fehrenbecher, J. B., and Blacet, F. E.  
Gas protection afforded by Japanese canisters. Progress report, May 30, 1945. Jun 1945.  
8p diagrs, tables. MI \$1.00 Ph \$3.00.
- OSRD 5241 PBA 6028 (I-540)  
Wall, F. T.  
Preparation and properties of aerosols. 1945.  
8p MI \$1.50 Ph \$1.00.
- OSRD 5245 PBM 5874 (I-496)  
Cori, Carl F., and others  
Effects of bis (beta-chloroethyl) sulfide (R) and bis (beta-chloroethyl) methimine (RM2) on enzymes in vitro and in vivo, to February 28, 1945. Jun 1945.  
41p MI \$1.50 Ph \$3.00.
- OSRD 5247 PBA 5937 (I-497)  
Smith, Lee Irvin, and Engelhardt, Vaughn  
Paraphenylenediamine compounds, to February 10, 1944. Jun 1945.  
31p Ph \$3.00 MI \$1.50.
- OSRD 5251 PBL 34764 (3-267)  
Penner, S. S.  
Radiation phenomena in rockets. Oct. 1945.  
88p graphs, tables. MI \$2.00 Ph \$6.00.
- OSRD 5253 See OSRD 4891.
- OSRD 5254 PBL 4610 (I-322)  
Standard Oil Development Company  
Development of the MOBX incendiary bomb. 1945.  
39p Ph \$3.00 MI \$1.50.
- OSRD 5258 PBL 68913 (5-78)  
Beth, Richard A.  
Penetration theory: Separable force laws and the time of penetration. Jun 1945.  
22p drawings, graphs. MI \$1.00 Ph \$2.00.
- OSRD 5261 PBL 40543 (3-739)  
Kissam, Philip  
Evaluation of Second Air Force harmonization procedure. Jul 1945.  
18p graph. MI \$1.00 Ph \$2.00.
- OSRD 5262 See OSRD 4866.
- OSRD 5263 PBL 19790 (I-1246)  
Avery, Howard S., and Cook, Earnshaw  
Heat-resistant alloys for ordnance material aircraft and naval engine parts (H-102): Final report, Part I, Heat-resistant alloys of the 21% Cr: 9% Ni type. Jun 1945.  
51p photos, tables, curves. MI \$1.00 Ph \$4.00.
- OSRD 5264 PBL 19555 (I-1347)  
Gensamer, M., and others  
Plastic flow of aluminum aircraft sheet under combined loads. (NA-149) (NA-150): Part V. Strain distribution in formed parts. Final report, Dec 31, 1944. Jun 1945.  
38p curves, diagrs, phot. MI \$1.50 Ph \$3.00.
- OSRD 5265 PBL 18486 (I-1438)  
Grenell, L. H., and others  
Examination of enemy material (OD-113) (AC-77) (N-119): metallurgical examination of a German canteen and messkit; and Japanese canteens and helmets. Progress report. Jun 1945.  
24p MI \$1.50 Ph \$2.00.
- OSRD 5269 PBL 18362 (I-1270)  
Lindsay, Donald B., and others  
Factors determining accuracy of reception of oscilloscope code. Jun 1945.  
20p tables. MI \$1.50 Ph \$2.00.
- OSRD 5282 PBL 20216 (I-1500)  
Gensamer, M., and others  
Plastic flow of aluminum aircraft sheet under combined loads (NA-149) (NA-150): Part I. Development of tests for forming limits; stress-strain curves under combined loads. Final report, Dec 31, 1944. Jun 1945.  
34p photos, diagrs, graphs. MI \$1.50 Ph \$3.00.
- OSRD 5283 PBL 19553 (I-1347)  
Gensamer, M., and others  
Plastic flow of aluminum aircraft sheet under combined loads (NA-149) (NA-150): Part II. Forming limits for aircraft sheets at room temperature. Final report, Dec 31, 1944. Jun 1945.  
54p curves, photos, tables. MI \$1.00 Ph \$4.00.
- OSRD 5284 PBL 19556 (I-1347)  
Gensamer, M., and others  
Plastic flow of aluminum aircraft sheet under combined loads. (NA-149) (NA-150): Part IV. Theory of forming limits. Final report, Dec 31, 1944. Jun 1945.  
44p curves. MI \$1.50 Ph \$3.00.
- OSRD 5285 PBA 4247 (I-347)  
Smith, Lee Irvin, and others  
Preparation of candidate insect repellents. 1945.  
5p Ph \$1.00 MI \$1.50.
- OSRD 5288 PBL 58222 (4-989)  
Union Switch and Signal Co., Swisavale, Pa.  
VB-I tail assembly. Final Report. Jun 1, 1943 to Mar 30, 1944. Jun 1945.  
53p photos, diagrs. MI \$2.00 Ph \$4.00.
- OSRD 5294 PBL 39576 (3-496)  
Karlin, J. E.  
Auditory tests for the ability to discriminate the pitch and the loudness of noises. Aug 1945.  
35p tables, graphs, diagrs. MI \$1.00 Ph \$3.00.
- OSRD 5295 PBL 27344 (2-536)  
McCormick, W. W., and Fairbanks, A. F.  
The type 200 microflash lamp and a microflash unit for ballistic photography. Final report, Jan 1, 1943-Feb 28, 1945. Apr 1945.  
22p diagrs, photos. MI \$1.00 Ph \$2.00.
- OSRD 5297 PBL 27338 (2-441)  
Hole, W. L., and McCormick, W. W.  
The high intensity flash lamp, type 10. Final supplementary report, Aug 25, 1943 to Mar 1, 1945. Oct 1945.  
22p photos. MI \$1.00 Ph \$2.00.
- OSRD 5298 PBL 27340 (2-574)  
Hole, W. L., and Holland, L. M.  
A photocell test set. Final report, Nov 1, 1943 to Jul 19, 1944. Apr 1945.  
69p diagrs, graphs, photos. MI \$2.00 Ph \$5.00.
- OSRD 5299 PBL 27351 (2-570)  
Bensis, Alan C., and others  
Improved far infrared receivers and associated optics. Jul 1945.  
27p photos, graphs, drawing. MI \$1.00 Ph \$2.00.
- OSRD 5300 PBL 27309 (2-544)  
Homer, E. C.  
Concentrated-arc lamps. Final report May 12, 1943-Sep 1, 1945. Aug 1945.  
109 diagrs, photos. MI \$3.00 Ph \$8.00.
- OSRD 5302 PBL 13306 (I-900)  
Frederiksen, Norman  
A further study of the validity of the Arithmetical computation test. Jul 1945.  
12p MI \$1.50 Ph \$1.00.

## Bibliography

- OSRD 5307 PBL 12159 (I-1197)  
Mason, Harry H.  
Indoctrination for voice communication at altitude. Jul 1945.  
30p photos, diagr, tables. MI \$.50 Ph \$3.00.
- OSRD 5309 PBL 15638 (I-1061)  
Johnstone, H. F., and others  
The development of an aerosol generator for dispersing DDT solutions from the exhaust of an aircraft engine: to Jun 1, 1945. Jul 1945.  
70p photos, diagr, graphs, tables. MI \$1.00 Ph \$.50.
- OSRD 5310 PBL 15635 (I-1061)  
Hodges, Kenneth C., and Rowell, John C.  
Test of large area mosquito control using the inventors' model of the Hochberg-Lamer aerosol generator in Lodge Village, Georgetown, B. G. on April 12, 1945. Jul 1945.  
13p table, maps. MI \$.50 Ph \$1.00.
- OSRD 5313 PBL 20288 (2-108)  
Berry, Richard W., and others  
A system of automatic devices for the detection and recording of errors in a 105 mm. Howitzer battery. Jul 1945.  
22p photos, diagr. MI \$.50 Ph \$2.00.
- OSRD 5314 PBL 27554 (2-108)  
Columbia University. Airborne Instruments Laboratory  
Saturated-core magnetometers, MA-120. May 1945.  
40p diagr, graphs. MI \$1.00 Ph \$3.00.
- OSRD 5319 PBL 28639 (2-440)  
Carnegie Institution of Washington. Mount Wilson Observatory  
Optical tests of five lenses for aerial photography. Sep 1945.  
30p graphs. MI \$1.00 Ph \$3.00.  
See also PB 28522.
- OSRD 5323 PBL 22900 (2-35)  
Bartholomew, E. L., Jr., and others  
Examination of enemy material (OD-113) (AC-77) (N-119): Metallurgical investigation of an 8 cm. Japanese anti aircraft gun. Progress report. Jul 1945.  
43p drawings, graphs, photos. MI \$.50 Ph \$3.00.
- OSRD 5324 PBL 4440 (I-405)  
Masoner, P. H., and others  
Memorandum on operational drill charts for solo-shell evaporators, destroyer escorts and APDs, DE converted (steam driven), and Instructor's manual. 1945.  
19p Ph \$2.00 MI \$.80.
- OSRD 5325 PBL 24881 (2-325)  
Kornel, O., and others  
Investigations on new magnetic recording media. Final report. Jun 1945.  
103p photos, tables, graphs, diagr. MI \$1.50 Ph \$7.00.
- OSRD 5328 PBL 23696 (2-298)  
Harvard University. Applied Mathematics Group  
An exposition of Wiener's theory of prediction. Jun 1945.  
19p MI \$.50 Ph \$2.00.
- OSRD 5329 PBL 8610 (I-538)  
Keyes, F. G.
- Oxygen generating equipment: Final report June 30, 1945. 1945.  
37p illus. MI \$.40 Ph \$26.00.
- OSRD 5331 PBL 22000 (I-1519)  
Seithers, V. L., Laboratories and Columbian Carbon Company  
Examination of enemy material: (OD-113) (AC-77) (N-119). Metallurgical examination of tire and tube from Japanese plane "Frances." Progress report 166, May 24, 1945. Jul 1945.  
13p photos. MI \$.50 Ph \$1.00.
- OSRD 5332 PBL 19573 (I-1411)  
Sechs, George, and others  
Correlation of information available on the fabrication of aluminum alloys (Na-126): Final report. Section V, Formability of aluminum alloys for use in military aircraft: Part VI, Stretching of rectangular bars. Jun 1945.  
22p tables, graphs. MI \$.50 Ph \$2.00.
- OSRD 5333 PBL 31210 (2-653)  
Schaefer, Raymond H., and others  
Experimental production of pilot static and centrifugal castings for the armed services: Part II—Precision casting of gas turbine diaphragms. Final report, Mar 1945. Jul 1945.  
51p photos, tables, graphs. MI \$2.00 Ph \$4.00.
- OSRD 5334 PBL 30773 (2-589)  
Gardner, Frank S., and Avery, Howard S.  
Heat resistant alloys for ordnance material, and aircraft and naval engine parts: Part II—Cobalt and nickel in 26% Cr alloys. Final report. Jul 1945.  
26p MI \$1.00 Ph \$2.00.
- OSRD 5338 PBL 31956 (2-810)  
Silverman, Leslie, and others  
Fundamental factors in the design of protective respiratory equipment. A portable instrument for measuring respiratory air flows under field conditions. Progress report, Jun 1, 1945. Jul 1945.  
54p MI \$2.00 Ph \$4.00.
- OSRD 5339 PBL 31957 (2-810)  
Silverman, Leslie, and others  
Fundamental factors in the design of protective respiratory equipment. A study and an evaluation of inspiratory and expiratory resistances for protective respiratory equipment. Progress report, May 1, 1945. Jul 1945.  
562p MI \$12.00 Ph \$38.00.
- OSRD 5344 PBL 15643 (I-1012)  
Brinton, R. K., and Otvos, J. K.  
Operation manual for Dickinson Field Conductivity meter. (Progress report.) June 25, 1945. Jul 1945.  
37p photos, diagr, tabs. MI \$.50 Ph \$3.00.
- OSRD 5346 PBL 33212 (2-871)  
Griffin, LeVan, and Morikawa, George K.  
The behavior of steel under conditions of multiaxial stress and the effect on this behavior of metallographic structure and chemical composition (N3-307) (welded series and special unwelded tests). Second progress report, Oct 15, 1944-Feb 15, 1945. Jul 1945.  
46p photos, curves, drawings, tables. MI \$1.00 Ph \$4.00.
- OSRD 5352 PBL 31209 (2-514)  
DeGarmo, E. Paul, and others  
Cleavage fracture of ship plate as influenced by design and metallurgical factors (KS-336): Hatch corner specimen tests. Progress report, Nov 1, 1944-Mar 15, 1945. Jul 1945.  
58p photos. MI \$.20 Ph \$.40.  
See also PB's 19934 and 19935.
- OSRD 5357 PBL 22004 (2-45)  
Bartholomew, E. L., and others  
Examination of enemy material (OD-113; AC-77; N-119): Metallurgical investigation of Japanese 37 mm. tank gun. Progress report 184, May 31, 1945. Jul 1945.  
22p graphs, photos. MI \$.50 Ph \$2.00.
- OSRD 5359 PBL 33342 (2-863)  
Carnegie Institution of Washington. Geophysical Laboratory  
Studies and investigations in connection with the development of a new light source consisting of a phosphor rod irradiated by high voltage electrons. Final report. Jun 1945.  
77p tables, graphs, diagr. MI \$2.00 Ph \$6.00.
- OSRD 5360 PBL 33363 (2-864)  
Miller, M. F.  
Infrared stimulation of phosphors. Final report. Aug 4, 1943-Jun 30, 1945. Jul 1945.  
50p tables, diagr. MI \$1.00 Ph \$4.00.
- OSRD 5361 PBL 33366 (2-862)  
Barnett, C. E.  
Development of phosphorescent materials. Final report, Sep 15, 1942-Jun 1, 1945. Jul 1945.  
35p tables, graphs. MI \$1.00 Ph \$3.00.
- OSRD 5362 PBL 33365 (2-862)  
Barnett, C. E.  
Luminous materials. Final report, Sep 15, 1942-Jun 30, 1945. Jul 1945.  
19p MI \$1.00 Ph \$2.00.
- OSRD 5364 PBL 12152 (I-766)  
Keller, Fred S., and Herbert, Marvin J.  
Goodness of signal formation in sending International Morse Code. Jul 1945.  
17p MI \$.50 Ph \$2.00.
- OSRD 5365 PBL 12153 (I-766)  
Jerome, Edward A., and Keller, Fred S.  
A test of two "remedial" devices in high-speed code reception. Jul 1945.  
17p MI \$.50 Ph \$2.00.
- OSRD 5366 PBL 12151 (I-766)  
Keller, Fred S., and Jerome, Edward A.  
Progress in receiving International Morse code. Jul 1945.  
47p illus. MI \$.50 Ph \$4.00.
- OSRD 5374 PBL 30780 (2-513)  
Heussner, C. E., and others  
Examination of enemy material (OD-113) (AC-77) (N-119): Metallurgical examination of flap tracks from "Judy" and "Frances" and skin sections from "Frank." Progress report No. 188, Apr 30, 1945. Jul 1945.  
9p drawings, photo. MI \$1.00 Ph \$1.00.

## *Bibliography*

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- |   |                    |   |
|---|--------------------|---|
| OSRD 5377<br>Fonda, G. R.                                   | PBL 33361 (2-863)  | Preparation and characteristics of zinc sulfide phosphors stimulated by infra-red. Final report. Jul 1945.<br>10p MI \$1.00 Ph \$2.00.  |
| OSRD 5379<br>Keller, Fred S.                                | PBL 12154 (1-1216) | The radio code research project. Final report of Project SC-88. Jul 1945.<br>8p MI \$.50 Ph \$1.00.   |
| OSRD 5380<br>Gensamer, Maxwell, and others                  | PBL 15865 (1-1184) | Correlation of laboratory tests with full scale ship plate fracture tests (NS-336). Final report. Jul 1945.<br>24p graphs. MI \$.50 Ph \$2.00.  |
| OSRD 5382<br>Cohen, Leon M.                                 | PBL 33191 (3-282)  | Aerodynamic lead pursuit courses. Jul 1945.<br>70p diagrs., tables. MI \$2.00 Ph \$5.00.<br>See also PB 5584.   |
| OSRD 5383   | See OSRD 4088.     |   |
| OSRD 5385<br>Keyes, F. G., and others                       | PBL 27292 (2-839)  | Stability and concentration of hydrogen peroxide. Final report. Aug 1945.<br>22p drawings. MI \$1.00 Ph \$2.00.   |
| OSRD 5386<br>U.S. National Defense Research Committee       | PBL 34122 (3-40)   | Studies of the design of illuminated reticles for stereoscopic range and height finders. Jun 1945.<br>29p drawing, table. MI \$1.00 Ph \$2.00.  |
| OSRD 5390<br>Baldabuck, Edith M., and Brown, Weldon G.      | PBA 5831 (1-469)   | Ultraviolet absorption spectra of compounds related to DDT, to July 19, 1945. 1945.<br>13p illus. Ph \$1.00 MI \$.50.   |
| OSRD 5393<br>Montgomery, D., and Taub, A. H.                | PBL 43050 (3-659)  | Reactions of simple systems under blast loading. Monthly report Jun 25-Jul 25, 1945. Aug 1945.<br>17p graph, tables. MI \$1.00 Ph \$2.00.   |
| OSRD 5398<br>Benson, A. H.                                  | PBL 13112 (1-806)  | Airborne odograph: a device for indicating and graphically recording the ground position and track of an aircraft during flight. Jul 1945.<br>87p illus. MI \$1.00 Ph \$6.00.   |
| OSRD 5407<br>Shriner, R. L.                                 | PBL 30709 (2-827)  | Color tests for high explosives. Progress report. Aug 1945.<br>16p MI \$1.00 Ph \$2.00.   |
| OSRD 5402<br>Rochester University                           | PBL 28638 (2-488)  | The prism method for harmonization of B-29 remote control turrets. Aug 1945.<br>47p photos, sketches. MI \$1.00 Ph \$4.00.  |
| OSRD 5403<br>Peterson, Max                                  | PBL 28697 (2-630)  | The wire method for harmonization of B-29 remote control turrets. Aug 1945.<br>45p photos. MI \$1.00 Ph \$3.00.   |
| 'OSRD 5404<br>Merrill Flood and Associates, Princeton, N.J. | PBL 28632 (2-836)  | The mirror boresight method for harmonization of B-29 remote control turrets. Aug 1945.<br>12p MI \$1.00 Ph \$1.00.   |
| OSRD 5407<br>Von Berg, Robert L., and Catterall, W. E.      | PBL 8348 (1-607)   | Characteristics of the oxygen absorbents, Ethomine and Fluamine. 1945.<br>138p illus. MI \$1.50 Ph \$10.00.   |
| OSRD 5408<br>Keller, J. B., and others                      | PBL 31051 (2-892)  | The acoustic shielding effect of baffles. Jul 1945.<br>8pp graphs. MI \$2.00 Ph \$6.00.   |
| OSRD 5409<br>Grenell, L. H., and others                     | PBL 22003 (2-46)   | Examination of enemy material (OD-113; AC-77; N-119): Metallurgical examination of a Japanese 20 mm mortar grenade smoke shell and fuze. Progress report 189, Jun 14, 1945. Aug 1945.<br>7p photos, tables. MI \$.50 Ph \$1.00.           |
| OSRD 5410<br>Grenell, L. H., and others                     | PBL 22002 (2-46)   | Examination of enemy material (OD-113; AC-77; N-119) Metallurgical examination of a Japanese 20 mm aircraft machine gun. Progress report 190, Jun 19, 1945. Aug 1945.<br>11p photos. MI \$.50 Ph \$1.00.                                  |
| OSRD 5411<br>Grenell, L. H., and others                     | PBL 22001 (1-1590) | Examination of enemy material: (OD-113) (AC-77) (N-119). Metallurgical examination of float strut from Japanese aircraft "Paul." Progress report 191, Jun 22, 1945. Aug 1945.<br>10p photos, tables. MI \$.50 Ph \$1.00.                  |
| OSRD 5413<br>Mason, Harry M.                                | PBL 12031 (1-767)  | Studies of voice factors affecting the intelligibility of voice communication in noise: II. Pitch. Aug 1945.<br>19p illus. MI \$.50 Ph \$2.00.  |
| OSRD 5414<br>Haagen, C. Hess                                | PBL 12030 (1-902)  | Intelligibility measurement: twelve-word tests. Aug 1945.<br>24p MI \$.50 Ph \$2.00.  |
| OSRD 5420<br>Wells, Cyril, and others                       | PBL 15890 (1-1360) | Improvement in wrought gun tubes (00-34-3): Final report. Part I—Operating characteristics of specification WYX3-78, Vol. I. Jun 1945. Aug 1945.<br>121p MI \$1.50 Ph \$9.00.<br>For Vol. II see PB 15893.                                |
| OSRD 5420<br>Wells, Cyril, and others                       | PBL 15893 (1-1422) | Improvement in wrought gun tubes (00-34-3): Part I—Operating characteristics of specification WYX3-78, Vol. II. Final report, Aug 6, 1945. Aug 1946.<br>154p charts, curves, tables.<br>MI \$2.00 Ph \$11.00.<br>For Vol. I see PB 15890. |
| OSRD 5422<br>Smith, Kinsey, R.                              | PBL 12028 (1-1043) |   |
|   |                    | Final report in summary of work in job analysis qualification and placement of personnel in the amphibious force. Aug 1945.<br>22p MI \$.50 Ph \$2.00.  |
| OSRD 5423<br>Cohen, Leon M.                                 | PBL 5584 (1-823)   | Equations for aerodynamic lead pursuit courses. Jul 1945.<br>54p diagrs. MI \$.50 Ph \$3.00.  |
| OSRD 5425<br>Kappauf, William E.                            | PBM 16459 (1-1190) | Summary of research on psychological problems in the operation of antiaircraft lead computing sights and directors. Final report, Sep 29, 1945. Sep 1945.<br>12p MI \$.50 Ph \$1.00.  |
| OSRD 5430<br>Swift, E. H., and Niemann, Carl                | PBA 5892 (1-1143)  | A system for the ultimate analysis of chemical warfare agents: Part III. Progress report to June 22, 1946. Aug 1946.<br>122p MI \$1.50 Ph \$9.00.   |
| OSRD 5434<br>Swift, E. H., and Niemann, Carl                | PBA 5893 (1-408)   | A course of instruction for the personnel of the ultimate analysis section of the M-2 Chemical Laboratory Company. 1945.<br>24p Ph \$2.00 MI \$.50.   |
| OSRD 5438<br>Mehl, R. F., and others                        | PBL 15832 (1-1409) | Improvement in gun steel ingot practice (00-34-3). Part II. Plant experiments. Final report, Jun 15, 1945. Aug 1945.<br>29p diagrs., photos. MI \$.50 Ph \$3.00.  |
| OSRD 5440<br>Gross, G. L., and Spaulding, W. P.             | PBL 34748 (2-885)  | Tables of ranges and times of flight for projectiles with small ballistic coefficients. Aug 1945.<br>32p charts, tables. MI \$1.00 Ph \$3.00.   |
| OSRD 5441<br>Albert, A. A.                                  | PBL 27420 (2-436)  | Camera evaluation of bomber gun sights. Jul 1945.<br>153p graphs, photos, tables.<br>MI \$4.00 Ph \$11.00.  |
| OSRD 5444<br>Eastman Kodak Co., Rochester, N. Y.            | PBL 33246 (2-822)  | A spectrograph for aerial use (the spectrograph). Dec 1944.<br>85p photos, diagrs., tables.<br>MI \$2.00 Ph \$5.00.   |
| OSRD 5445<br>Haskell, W. A.                                 | PBL 34775 (2-878)  | An analytical approximation for the underwater trajectory of a nonrotating projectile. Jun 1945.<br>38p graphs. MI \$1.00 Ph \$3.00.  |
| OSRD 5446<br>Mathers, Frank C.                              | PBL 22477 (2-238)  | Investigation of methods of producing magnesium fluoride for the filming of lenses. Aug 1945.<br>17p MI \$.50 Ph \$2.00.  |

## Bibliography

- OSRD 5451 PBL 5928 (I-471)  
Holzman, George  
The sampling and estimation of AC in the presence of titanium-tetrachloride, chlorosulfonic acid, and sulfurtrioxide smokes. 1945.  
44p illus. Ph \$3.00 Mi \$.50.
- OSRD 5452 PBL 5904 (I-481)  
Price, Charles C., and Jackson, William G.  
Some aspects of the behavior of the fluoroacetates and fluoroethanol as water contaminant. 1945.  
42p Mi \$.50 Ph \$3.00.
- OSRD 5453 PBL 15833 (I-1356)  
Mehl, R. F., and others  
Improvement in wrought gun tubes (00-34-3). Final report. Part II: Effect of the angle of test (relative to fiber direction) on the tensile and impact properties of quenched and tempered steel forgings. Jun 1945. Aug 1945.  
25p graphs, tables. Mi \$.50 Ph \$2.00.
- OSRD 5454 PBL 15834 (I-1356)  
Mehl, R. F., and others  
Improvement in wrought gun tubes (00-34-3). Final report. Part III: Linear correlations among the tensile and impact properties in quenched out gun tubes. Jun 1945. Aug 1945.  
26p graphs, tables, photos. Mi \$.50 Ph \$2.00.
- OSRD 5455 PBL 15835 (I-1357)  
Mehl, R. F., and others  
Improvement in wrought gun tubes (00-34-3). Final report. Part V: Effect of forging reduction on average ductility (reduction of area, transverse and longitudinal). Jun 1945. Aug 1945.  
22p graphs, tables. Mi \$.50 Ph \$2.00.
- OSRD 5456 PBL 21998 (I-1435)  
Grenell, L. H., and others  
Examination of enemy material: (00-113) (AC-77) (N-119). Metallurgical examination of a German Volkswagen engine. Progress report 1942, Jul 11, 1945. Aug 1945.  
33p photos. Mi \$.50 Ph \$3.00.
- OSRD 5457 PBL 24886 (2-218)  
Hill, G. Albert, and Clarke, R. G.  
Tests of photoflash bombs. Progress report. Aug 1946.  
37p photos, graphs, tables. Mi \$.50 Ph \$3.00.
- OSRD 5458 PBL 4453 (I-467)  
Viteles, Morris S., and others  
Summary of project RR-106 activity at Pre-commissioning Engineering Training Center, Treasure Island, California. 1945.  
44p Ph \$3.00 Mi \$.50.
- OSRD 5459 PBL 4452 (I-466)  
Organist, M. E., and Willis, W. G.  
Progressive engineering instruction stage III, operational training building. Organization of instruction: Instructors' manual, "A" division; Instructor's manual, "B" division; Instructor's manual, "M" division; Instructor's manual "E" division. 1945.  
25p Ph \$2.00 Mi \$.50.
- OSRD 5461 PBL 12156 (I-1497)  
Mason, Harry M.  
Training studies in voice communication: III. Effects of training in articulation. Aug 1945.  
17p Mi \$.50 Ph \$2.00.
- OSRD 5464 PBL 21118 (I-1402)  
Brown, R. M., and others  
The mechanical evaluation of various types of integrals from a plot of the dependent variable as some function of the independent variable: The theory, construction, and use of the simultaneous multiple-function integrator. Aug 1945.  
21p diagrs. Mi \$.50 Ph \$2.00.
- OSRD 5467 PBL 5496 (I-437)  
Kharasch, M. S., and others  
Stabilization of CK to July 9, 1945. 1945.  
6p illus. Ph \$1.00 Mi \$.50.
- OSRD 5468 PBA 5497 (I-472)  
Shriner, R. L., and Specks, J. C., Jr.  
The Synthesis of substituted iso-quinolines as antimalarial intermediates. 1945.  
15p Ph \$1.00 Mi \$.50.
- OSRD 5469 PBL 23728 (2-456)  
New York University, Applied Mathematics Group  
Remarks on the mathematical theory of detonation and deflagration waves in gases (supplement to the manual on supersonic flow and shock waves). Jul 1945.  
49p graphs. Mi \$.50 Ph \$4.00.  
Suppl. to PB 23779.
- OSRD 5470 PBL 5495 (I-470)  
Brown, M. G., and others  
Field sampling of H vapors with tape recorders. 1945.  
79p illus. Ph \$8.00 Mi \$1.00.
- OSRD 5471 PBL 16425 (I-1247)  
Butts, Allison, and Reiber, Paul L., Jr.  
Investigation of the effects of impurities on the ferro-magnetism of non-ferrous alloys (00-150): Final report, Jan 15, 1944-May 31, 1945. Aug 1945.  
122p tables, curves. Mi \$.50 Ph \$9.00.
- OSRD 5472 PBL 21999 (I-1434)  
Grenell, L. H., and others  
Examination of enemy material: (00-113) (AC-77) (N-119). Metallurgical examination of a Japanese Kawasaki type 2 aircraft engine. Progress report 198, May 8, 1945. Aug 1945.  
87p photos. Mi \$.50 Ph \$6.00.
- OSRD 5476 PBL 15836 (I-1421)  
Mehl, R. F., and others  
Improvement in wrought gun tubes (00-34-3). Part VI: Effect of reheat treatment (reheating and draw) and redraw on transverse ductility. Final report, Jun 1945. Aug 1945.  
31p graphs, tables. Mi \$.50 Ph \$3.00.
- OSRD 5477 PBL 15837 (I-1357)  
Mehl, R. F., and others  
Improvement in wrought gun tubes (00-34-3): Final report. Part VII: Effect of upsetting on average transverse ductility in seamless gun tubes. Jun 1945. Aug 1945.  
18p graphs, photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 5478 PBL 21997 (I-1418)  
Grenell, L. H., and others  
Examination of enemy material: (00-113) (AC-77) (N-119). Metallurgical examination of A. P. and H. E. ammunition for Japanese 20 mm. Browning-type gun. Progress report 194, Jul 13, 1945. Aug 1945.  
9p photos. Mi \$.50 Ph \$1.00.
- OSRD 5479 PBL 21996 (I-1426)  
Grenell, L. H., and others  
Examination of enemy material: (00-113) (AC-77) (N-119). Metallurgical examination of German crashflak helmet and Japanese horseshoes and shoe last. Progress report 195. Jul 19, 1945. Aug 1945.  
11p photos, tables. Mi \$.50 Ph \$1.00.
- OSRD 5480 PBL 21995 (I-1419)  
Grenell, L. H., and others  
Examination of enemy material: (00-113) (AC-77) (N-119). Metallurgical examination of a Japanese 40 mm. A.P. H.E. shell. Progress report 197, Jul 18, 1945. Aug 1945.  
6p photos. Mi \$.50 Ph \$1.00.
- OSRD 5481 PBL 23267 (2-892)  
Kirkwood, John, G., and Brinkley, Stuart R., Jr.  
Theoretical blastwave curves for cast TNT. Aug 1945.  
12p graph, tables. Mi \$1.00 Ph \$1.00.
- OSRD 5485 PBL 15649 (I-1359)  
Shiffman, Max, and Spencer, Donald C.  
The force of impact on a sphere striking a water surface. Second approximation. Jul 1945.  
68p graphs, photos. Mi \$1.00 Ph \$5.00.
- OSRD 5488 PBL 15639 (I-1136)  
Johnstone, H. F., and Goglia, M. J.  
The development of an exhaust smoke generator for military aircraft, July 20, 1945. Aug 1945.  
55p photos, tables, graphs. Mi \$1.00 Ph \$4.00.
- OSRD 5491 PBL 15839 (I-1184)  
Fitterer, G. R., and O'Donnell, William M.  
Time-temperature-hardness relations in new gun steels. Final report, Jan 31, 1945. Aug 1945.  
40p graphs, charts. Mi \$.50 Ph \$3.00.
- OSRD 5492 PBL 19938 (I-1244)  
Banta, H. M., and others  
Investigation of metallurgical quality of steels used for hull construction (Na-256): Progress report, Jun 15, 1945. Aug 1945.  
106p Mi \$.50 Ph \$8.00.
- OSRD 5493 PBL 21994 (I-1406)  
Grenell, L. H., and others  
Examination of enemy material: (00-113) (AC-77) (N-119). Metallurgical examination of a Japanese 7.92 mm. type 1 flexible A/C machine gun (twin barreled) and a flexible ammunition chute for type 2, hand-operated turret 12.7 mm. machine gun, Sally and Lily dorsal position. Progress report 193, Jul 12, 1945. Aug 1945.  
18p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 5497 PBL 12164 (I-903)  
Mallory, Louis A., and Temple, William J.  
Final report in summary of work on the selection and training of telephone talkers. Aug 1945.  
38p Mi \$.50 Ph \$3.00.
- OSRD 5499 PBL 33204 (2-803)  
Ducker, F. T., Jr., and others  
A sensitive photoelectric smoke penetrometer. Progress report, Jul 30, 1945. Aug 1945.  
30p photos, graphs, diagrs. Mi \$.100 Ph \$2.00.

## Bibliography

65

- OSRD 5604 PBL 21993 (I-1402)  
Granell, L. H., and others  
Examination of enemy material (OD-112; AC-77; N-110). Metallurgical examination of a German Panther, Mark V, tank engine. Progress report 28, Jul 23, 1945. Aug 1945.  
22p photos, tables. MI \$1.00 Ph \$2.00.
- OSRD 5605 PBL 4460 (I-466)  
Organist, W. E.  
Progressive engineering instruction, stage III: operational training building, general quarters drillin. 1945.  
12p Ph \$1.00 MI \$1.50.
- OSRD 5607 PBL 4461 (I-466)  
Cover, B. J., and others  
The construction and validation of a work readiness test for distilling plant operators. 1945.  
38p Ph \$3.00 MI \$1.50.
- OSRD 5608 PBL 4460 (I-466)  
Cover, B. J., and Viteles, M. S.  
Summary of project NA-106 activity at CVE Pre-commissioning School, Puget Sound Navy Yard, Bremerton Washington. 1945.  
16p illus. Ph \$2.00 MI \$1.50.
- OSRD 5610 PBA 15627 (I-1018)  
Clark, J. H.  
Exhaust aerosol generator on the PBJ-1H for the dispersal of DDT and oil smoke. (Progress report.) Aug 1945.  
22p photos, diagrs, tabs. MI \$1.50 Ph \$2.00.
- OSRD 5616 PBL 21992 (I-1410)  
Granell, L. H., and others  
Examination of enemy material: Metallurgical examination of a Japanese 7.92 mm. type 98 flexible A/C Machine gun. Progress report 20, Jul 25, 1945. Aug 1945.  
16p photos, tables. MI \$1.50 Ph \$2.00.
- OSRD 5617 PBL 21991 (I-1433)  
Granell, L. H., and others  
Examination of enemy material (OD-112; AC-77; N-110): Metallurgical examination of wing hinge fittings from Japanese "Frances" aircraft. Progress report 200, Jul 26, 1945. Aug 1945.  
9p photos. MI \$1.50 Ph \$1.00.
- OSRD 5618 PBL 21989 (I-1410)  
Granell, L. H., and others  
Examination of enemy material (OD-112; AC-77) (N-110): Metallurgical examination of a Japanese droppable fuel tank. Progress report 201, Jul 31, 1945. Aug 1945.  
10p photos, tables. MI \$1.50 Ph \$1.00.
- OSRD 5619 PBL 21988 (I-1410)  
Granell, L. H., and others  
Examination of enemy material (OD-112; AC-77) (N-110): Metallurgical examination of a Japanese 57 mm. A.P.-H.E. and H.E. ammunition. Progress report 205, Aug 3, 1945. Aug 1945.  
12p photos, tables. MI \$1.50 Ph \$1.00.
- OSRD 5621 PBL 4448 (I-467)  
Hess, M. A., and Wesley, S. M.  
Constructing work readiness tests. 1945.  
14p Ph \$1.00 MI \$1.50.
- OSRD 5622 PBL 4611 (I-322)  
Standard Oil Development Company
- Penetration and performance tests of small incendiary bombs in a typical central German structure. 1945.  
50p illus. Ph \$4.00 MI \$1.50.
- OSRD 5623 PBL 28623 (2-610)  
Wheeler, T. L., and Bogrow, A.  
Phosphorus-phosphorus sesquimulfide eutectic as a special flame-thrower fuel. Final report, Aug 1945.  
110p drawings, graphs, tables. MI \$3.00 Ph \$8.00.
- OSRD 5624 PBL 28624 (2-639)  
Wheeler, T. L., and Bogrow, A.  
Thickened EMP fuels and ejection devices for EMP fuels. Progress report. Aug 1945.  
33p photos, drawings. MI \$1.00 Ph \$3.00.
- OSRD 5624a PBL 28625 (2-610)  
Wheeler, T. L., and Clancy, J. J.  
Thickened EMP fuels and ejection devices for EMP fuels. Progress report. Oct 1945.  
8p MI \$1.00 Ph \$1.00.
- OSRD 5636 PBL 4447 (I-466)  
Hamner, P. H., and Watters, L. R.  
Special engineering training programs. 1945.  
14p Ph \$1.00 MI \$1.50.
- OSRD 5638 PBL 20182 (I-1365)  
Lucks, C. F.  
Test methods of the Materials Laboratory, Engineering Division, Air Technical Service Command, Wright Field, Dayton, Ohio: Advisory report, Part I, Test methods of the Structural and Mechanical Test Branch, volumes I-II. Sep 1945.  
206p photos, drawings, MI \$2.50 Ph \$14.00.
- OSRD 5647 PBM 18858 (2-554)  
U. S. Office of Scientific Research and Development  
Studies of the toxicity of DINAA (Bis-nitroxyethylnitramine)  $(O_2NOCH_2CH_2)_2NNO_2$ . Jan 1946.  
67p photos, tables, graphs. MI \$1.00 Ph \$5.00.
- OSRD 5648 PBL 15737 (I-1129)  
Hamner, Nancy, and McClure, F. T.  
The reduced specific impulse of ideal gases. Oct 1945.  
46p tabs, graphs. MI \$1.50 Ph \$4.00.
- OSRD 5656 PBL 18292 (I-982)  
Satter, G. A., and Conrad, H. S.  
Predicting success in service school from the order of assignment. Sep 1945.  
35p tables. MI \$1.50 Ph \$3.00.
- OSRD 5657 PBL 18291 (I-904)  
Satter, G. A.  
An evaluation of the personal inventory and certain other measures in the prediction of submarine Officers evaluation of enlisted men. Sep 1945.  
21p MI \$1.50 Ph \$2.00.
- OSRD 5662 PBA 40553 (3-550)  
England, S. C., and Honk, E. M.  
Synthesis of chemical warfare toxic and vesicant agents-carbon monoxide pentamer. Progress report, Feb 9, 1945. Sep 1945.  
14p tables. MI \$1.00 Ph \$1.00.
- OSRD 5666 PBA 20635 (2-314)  
Latte, Randall, and others
- A joint report on the effect of particle size and speed of motion of DDT aerosols of uniform particle size in a wind tunnel on the mortality of mosquitoes. Sep 1945.  
32p MI \$1.50 Ph \$3.00.
- OSRD 5667 PBL 12050 (I-902)  
Haagen, C. Hess  
Intelligibility measurement: Twenty-four word multiple-choice tests. Sep 1945.  
33p MI \$1.50 Ph \$3.00.
- OSRD 5668 PBL 12051 (I-823)  
Black, John W.  
Final report in summary of work on voice communication. Sep 1945.  
83p MI \$1.00 Ph \$5.00.
- OSRD 5674 PBL 30768 (2-608)  
Rice, Oscar K.  
The theory of the burning of rocket powders. Final report, Aug 31, 1945. Nov 1945.  
30p diagr, graph. MI \$1.00 Ph \$2.00.  
See also PB 30767.
- OSRD 5610 PBL 18854 (I-1512)  
Strecker, H. A.  
Rate studies on primacord detonating fuzes. Progress report Oct 1, 1945. Oct 1945.  
8p drawings, tables. MI \$1.50 Ph \$1.00.
- OSRD 5618 PBL 29010 (2-212)  
Cotter, T. P., and Jacobs, S. J.  
Studies pertaining to the measurement of temperatures in a detonating explosive. Progress report, Dec 1945. Jan 1946.  
65p diagrs, photos, tables. MI \$1.00 Ph \$5.00.
- OSRD 5619 PBL 24808 (2-212)  
Drake, R. W.  
Three-station fragment retardation apparatus at Bruceton. Progress report, Oct 22, 1946. Dec 1945.  
32p curves, drawing, diagrs, photos. MI \$1.50 Ph \$3.00.
- OSRD 5622 PBL 24911 (2-212)  
Drake, R. W.  
Fragment velocity and panel penetration of several explosives in simulated shells. Progress report, Nov 8, 1946. Jan 1946.  
40p curves, drawings, tables. MI \$1.50 Ph \$3.00.
- OSRD 5623 PBL 24809 (2-212)  
Drake, R. W.  
Fundamental study of panel penetration. Progress report, Oct 18, 1946. Nov 1945.  
37p diagrs, tables. MI \$1.50 Ph \$3.00.
- OSRD 5626 PBL 34603 (3-6)  
Eyster, E. H., and Weltman, C. A.  
The preparation and properties of RDX-Composition A. Dec 1945.  
50p photos, tables, graphs. MI \$1.00 Ph \$4.00.
- OSRD 5634 PBL 16748 (I-1252)  
Mott, W. S., and others  
Experimental production of pilot static and centrifugal castings for the Armed Services: Part II. The fluidity of cast alloyed steels and irons. Final report, Jul 22, 1946 Sep 1945.  
26p photos, tables, graphs. MI \$1.50 Ph \$2.00.

## Bibliography

- OSRD 5639 PBL 34754 (2-962)  
MacDonald, J.K.L., and Schaaf, S.A.  
On the estimation of perturbations due to flow around blast gauges. Sep 1945.  
14p drawings. MI \$1.00 Ph \$1.00.
- OSRD 5643 PBL 33341 (2-866)  
Mard, Roland  
The preparation of infrared phosphors. Final report, Sep 1, 1943-Aug 31, 1945. Sep 1945.  
198p tables, graphs, diagrs, photos. MI \$4.00 Ph \$14.00.
- OSRD 5644 PBL 28640 (2-535)  
Carnegie Institution of Washington, Mount Wilson Observatory  
Two-mirror Schmidt camera for aerial photography. Final report Sep 1945.  
43p photos, diagrs. MI \$1.00 Ph \$3.00.
- OSRD 5647 PBL 12051 (I-899)  
Campbell, Ronald K.  
Final report in summary of research and development of classification aids by NDRC Project H-116a. Sep 1945.  
16p MI \$.50 Ph \$2.00.
- OSRD 5649 PBL 33254 (2-892)  
Brinkley, Stuart R., Jr., and Kirkwood, John G.  
Tables and graphs of the theoretical peak pressures, energies, and impulses of shock waves from explosive sources in sea water. Oct 1945.  
27p graphs, tables. MI \$1.00 Ph \$2.00.
- OSRD 5659 PBL 33258 (2-891)  
Brinkley, Stuart R., Jr., and Kirkwood, John G.  
The blast wave in air produced by line charges. Oct 1945.  
44p graphs, tables. MI \$1.00 Ph \$3.00.
- OSRD 5660 PBL 33259 (2-893)  
Richardson, John H.  
Theory of plastic deformation of thin plates with applications. Oct 1945.  
8ip graphs, tables. MI \$2.00 Ph \$5.00.  
See also PB's 24897, 32181 and 32495.
- OSRD 5665 PBL 27291 (2-794)  
Starkey, Robert L., and Schenone, John D.  
Microbiological and zoological aspects of paint destruction and metal corrosion. Final report, Nov 1, 1944-Jul 1, 1945. Sep 1945.  
77p MI \$2.00 Ph \$6.00.
- OSRD 5667 PBL 13290 (I-900)  
Conrad, Herbert S., and Setzer, G. A.  
The use of test scores and quality-classification ratings in predicting success in Electricians' Mates School. Sep 1945.  
35p MI \$.50 Ph \$3.00.
- OSRD 5669 PBL 5927 (I-560)  
Renshaw, Birdseye  
Summary report on "Miscellaneous toxicological studies," to September 1, 1945. 1945.  
15p Ph \$1.00 MI \$.50.
- OSRD 5674 PBL 40546 (3-400)  
Fastie, William G., and Peters, C. Wilbur  
Selective infra-red gas analyzers. Oct 1945.  
55p diagrs, drawings, graphs, photos. MI \$2.00 Ph \$4.00.
- OSRD 5677 PBL 24880 (2-258)  
Evjen, Haaken H., and Mills, W. V.  
Detection of small foreign bodies imbedded in the top soil by low frequency alternating currents. Final report. Sep 1945.  
31p photos, diagrs. MI \$.50 Ph \$3.00.
- OSRD 5680 PBL 23695 (2-302)  
Whitney, Hassler  
Tracking and the fire control problem. Sep 1945.  
27p MI \$1.00 Ph \$5.00.
- OSRD 5681 PBL 15214 (I-992)  
Neaton, W. H.  
Harvard University tropical fungus culture collection. Oct 1945.  
55p MI \$1.00 Ph \$4.00.
- OSRD 5682 PBL 40552 (4-3)  
Reuszer, Herbert W.  
Bacteria culture collection. Final report. Oct 1945.  
14p MI \$1.00 Ph \$1.00.
- OSRD 5683 PBL 11960 (I-1146)  
Wellman, R.H., and McCallan, S.E.A.  
Fungus resistance of plastics. Sep 1945.  
69p MI \$1.00 Ph \$5.00.
- OSRD 5684 PBL 33992 (2-869)  
Hutchinson, W. G.  
Further studies on the fouling of optical instruments. Report, Sep-Oct, 1945. Oct 1945.  
24p tables.  
MI \$1.00 Ph \$2.00.  
See also PB's 12052, 16418, 16448, 16450, 16451 and 16734.
- OSRD 5685 PBL 58092 (5-6)  
Jump, J.A., and Hutchinson, W. G.  
The fungus fouling of photographic film. Oct 1945.  
24p photos, tables. MI \$1.00 Ph \$2.00.
- OSRD 5686 PBL 33983 (2-869)  
Hutchinson, W. G.  
Studies on methods of testing hookup wires for resistance to fungus attack. Oct 1945.  
54p tables, diagrs, photos.  
MI \$2.00 Ph \$4.00.
- OSRD 5687 PBL 33994 (2-869)  
Hutchinson, W. G.  
Studies on methods of testing coating materials for resistance to fungus attack. Oct 1945.  
44p table, photos. MI \$1.00 Ph \$3.00.
- OSRD 5688 PBL 33995 (2-869)  
Hutchinson, W. G.  
Development of a method for testing resistance of plastics to fungus attack. Oct 1945.  
45p tables, photos.  
MI \$1.00 Ph \$3.00.
- OSRD 5689 PBL 11958 (I-987)  
Hutchinson, W. G.  
Studies on pure culture methods of testing fungus deterioration of textiles. Oct 1945.  
94p charts, photos, tabs. MI \$1.00 Ph \$7.00.
- OSRD 5690 PBL 33996 (2-870)  
Hutchinson, W.G., and others  
The tropical deterioration testing station at Barro Colorado Island. Oct 1945.  
27p photos. MI \$1.00 Ph \$2.00.  
See also PB 16451
- OSRD 5691 PBL 11954 (I-756)  
Johns Hopkins University  
The effect of moisture and fungus on electrical insulating materials. Oct 1945.  
22p MI \$.50 Ph \$2.00.
- OSRD 5692 PBL 11953 (I-849)  
Luce, R.H., and Stoker, W. C.  
Fungus growth on hookup wire. Oct 1945.  
17p MI \$.50 Ph \$2.00.
- OSRD 5693 PBL 21987 (I-1418)  
Bartholomew, E.L., and others  
Examination of enemy material (OD-113; AC-77; H-119); Metallurgical investigation of a Japanese 75 mm. regimental gun. Progress report 204, Jul 31, 1945. Sep 1945.  
25p photos, tables, graphs.  
MI \$.50 Ph \$2.00.
- OSRD 5710 PBL 15637 (I-983)  
Johnstone, H.F., and others  
Some theoretical aspects of the behavior of DDT aerosols dispersed from aircraft. (Progress report) Sep 1945.  
48p tabs, graphs. MI \$.50 Ph \$4.00.
- OSRD 5711 PBL 31207 (2-608)  
Morgan, Hyles  
Design and installation of El3-13 flame gun and equipment in M4A1 tank. Final report. Sep 1945.  
88p charts, diagrs, drawings.  
MI \$2.00 Ph \$6.00.
- OSRD 5712 PBL 21985 (I-1492)  
Grenell, L. H., and others  
Examination of enemy materiel (OD-113) (AC-77) (H-119); Metallurgical examination of German "Panther" (Mark V) tank parts. Progress report 203, Aug 8, 1945. Sep 1945.  
24p diagrs, photos. MI \$.50 Ph \$2.00.
- OSRD 5713 PBL 21983 (I-1496)  
Grenell, L. H., and others  
Examination of enemy materiel: (OD-113) (AC-77) (H-119). Metallurgical examination of Japanese 105 mm. H.E. Projectile. Progress report 209, Aug 10, 1945. Sep 1945.  
8p table, photos. MI \$.50 Ph \$1.00.
- OSRD 5714 PBL 21982 (I-1496)  
Grenell, L. H., and others  
Examination of enemy materiel: (OD-113) (AC-77) (H-119). Metallurgical examination of Japanese 47 mm. C/R H.E. U/F shell for model I A/T gun. Progress report 210, Aug 11, 1945. Sep 1945.  
8p tables, photos. MI \$.50 Ph \$1.00.
- OSRD 5715 PBL 21852 (I-1493)  
Grenell, L. H., and others  
Examination of enemy materiel: Metallurgical examination of a Japanese C/R 20 mm. Hotchkiss H.E. shell for model 98 A.A. gun. Progress report 211, Aug 13, 1945. Sep 1945.  
8p photos, tables. MI \$.50 Ph \$1.00.
- OSRD 5716 PBL 21886 (I-1418)  
Grenell, L. H., and others  
Examination of enemy materiel: Metallurgical examination of a Japanese 20 cm. rocket. Progress report 214, Aug 24, 1945. Sep 1945.  
10p photos. MI \$.50 Ph \$1.00.
- OSRD 5717 PBL 21885 (I-1491)  
Grenell, L. H., and others  
Examination of enemy materiel: Metallurgical examination of a German aircraft torpedo and warhead. Progress report 215, Aug 18, 1945.  
18p photos, tables. MI \$.50 Ph \$2.00.

## Bibliography

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- OSRD 5723 PBL 21887 (I-1418)  
Dunleavy, J. G., and others  
Examination of enemy material (OD-113) (AC-77; N-119). Metallurgical examination of a Japanese magnetic antitank mine and fuze. Progress report 213, Aug 24, 1945. Sep 1945.  
9p photos. MI \$.50 Ph \$1.00.  
Dup Series PB 24680.
- OSRD 5724 PBL 21990 (I-1417)  
Grenell, L. H., and others  
Examination of enemy material (OD-132; AC-77; N-119). Metallurgical examination of German 75 mm. Pak 40 antitank gun carriage. Progress report 207, Aug 18, 1945. Sep 1945.  
28p photos, drawings, tables. MI \$.50 Ph \$2.00.
- OSRD 5725 PBL 21984 (I-1419)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of Japanese 75 mm. anti-aircraft H. E. shell with fuze. Progress report 208, Aug 8, 1945. Sep 1945.  
9p photos. MI \$.50 Ph \$1.00.
- OSRD 5726 PBL 21985 (I-1403)  
Grenell, L. H., and others  
Examination of enemy material (OD-113 AC-77; N-119). Examination of German oxygen valve and. German and Japanese oxygen valve seats. Progress report 202, Aug 14, 1945. Sep 1945.  
7p photo. MI \$.50 Ph \$1.00.
- OSRD 5727 PBL 21882 (I-1491)  
Grenell, L. H., and others  
Examination of enemy material: Metallurgical examination of a German H. G. 34 anti-aircraft tripod. Progress report 218, Aug 18, 1945. Sep 1945.  
7p photos. MI \$.50 Ph \$1.00.
- OSRD 5729 PBA 32209 (2-859)  
Lamer, Victor K., and others  
Formulas utilizing DOT concentrate and/or Diesel oil for use in Army and Navy insecticidal aerosol generators (with notes on adult Muscoid fly toxicity). Progress report, Part 1, May 13, 1946; Part 2, Aug 18, 1945. Aug 1945.  
23p photos, diagrs. MI \$1.00 Ph \$2.00.
- OSRD 5730 PBL 15835 (I-1061)  
Brescia, Frank, and Wilson, Irwin  
Reports on the use in the South Pacific of the Navy screening smoke generator (M274) converted to an insecticidal aerosol generator according to the Hochberg-Lamer principle; Period covered, October 12, 1944 to April 27, 1945. May 1946.  
72p photos. MI \$1.00 Ph \$5.00.
- OSRD 5731 PBA 50828 (5-659)  
Lamer, Victor K., and others  
Salt marsh and anopheline mosquito field control tests, with the Hochberg-Lamer insecticidal generator, using oil-DOT aerosols. Progress report. Sep 1946.  
72p graphs, tables. MI \$2.00 Ph \$.50.
- OSRD 5732 PBA 31958 (2-810)  
Silverman, Leslie, and others  
Fundamental factors in the design of protective respiratory equipment. Inspiratory and expiratory air flow measurements on human subjects with and without resistance at several
- work rates. Final report, Aug 1, 1945. Sep 1945.  
38p. MI \$1.00 Ph \$3.00.
- OSRD 5738 PBL 33192 (3-54)  
Stoker, J. J., ed.  
Theoretical studies concerning the hydro-pulse (ideal mechanical performance characteristics). Jul 1945.  
148p graphs, drawing. MI \$3.00 Ph \$10.00.
- OSRD 5757 PBL 5215 (I-437)  
Knapp, Robert T.  
Force tests of concrete practice bombs, M38A2 practice bomb, AN-M43 G. P. 500 lb. bomb, AN-M65 L. C. 4,000 lb. bomb. 1945.  
3p illus. Ph \$3.00 MI \$.50.
- OSRD 5765 PBL 4021 (I-405)  
Rogers, H. H., and others  
Evaluation of methods of training in estimating a fixed opening range. 1946.  
50p Ph \$4.00 MI \$.10.
- OSRD 5766 PBL 12165 (I-824)  
Lindsay, Donald B.  
Final report in summary of work on the selection and training of radar operators. Sep 1945.  
27p MI \$.50 Ph \$3.00.
- OSRD 5767 PBL 16448 (I-1199)  
Pittsburgh University  
Tropical deterioration in optical instruments. Apr 1945.  
24p MI \$.50 Ph \$2.00.
- OSRD 5775 PBL 34773 (3-286)  
Hickman, C. W.  
Rocket target developed for the Army Ordnance department. Final report. Dec 1945.  
35p diagrs, graphs, photos. MI \$1.00 Ph \$3.00.
- OSRD 5777 PBL 34781 (3-267)  
Osborne, D. W., and Weissmann, B.  
Improvement of components for 4.5-in. rocket M8. Final report. Dec 1945.  
139p diagrs, graphs, photos, tables. MI \$3.00 Ph \$10.00.
- OSRD 5813 PBL 34760 (3-257)  
Newton, R. R.  
Spiral launching of 4.5-in. rockets. Final report, Dec 1945.  
36p graphs, photos, tables. MI \$1.00 Ph \$3.00.
- OSRD 5815 PBL 32219 (3-284)  
Bonner, L. G., and Avery, W. H.  
The jet-assisted take-off unit. Final report, Jan 30-May 15, 1946. Dec 1945.  
100p photos, diagrs, tables. MI \$2.00 Ph \$7.00.
- OSRD 5817 PBL 63645 (5-96)  
Beek, John, Jr., and others  
Studies of radiation phenomena in rockets. Final report, series F, No. 2. Jun 1946.  
102p graphs, tables. MI \$3.00 Ph \$7.00.
- OSRD 5828 PBL 43052 (8-819)  
Harmer, Nancy, and McClure, F. T.  
The reduced specific impulse of ideal gases. Final report. Jan 1946.  
28p graphs, tables. MI \$1.00 Ph \$2.00.
- OSRD 5843 PBL 58203 (4-1093)  
Alexander, M. E.  
Manufacture of wire strain gages for the measurement of thrust as applied to rocket research. Nov 1945.  
29p photos, diagrs. MI \$1.00 Ph \$2.00.
- OSRD 5846 PBL 58205 (4-955)  
Alexander, M. E.  
Standard automatic calibrator for A-C bridge and amplifiers. Nov 1945.  
17p photos, diagrs, tables. MI \$1.00 Ph \$2.00.
- OSRD 5847 PBL 50829 (4-585)  
Shulman, S., and Barber, W. H.  
Electronic blastmeter. Final report, series J, No. 2.1. Nov 1945.  
36p diagrs, graphs, photos. MI \$1.00 Ph \$3.00.
- OSRD 5849 PBL 34763 (3-267)  
Spaulding, W. P., and others  
X-Ray photography of burning rocket propellants. Final report. Dec 1945.  
14p diagr, photos. MI \$1.00 Ph \$1.00.
- OSRD 5853 PBL 34769 (3-265)  
Donin, M. N., and Donovan, J. J.  
Captured enemy propellants. Final report. Dec 1945.  
56p diagrs, graphs, photos. MI \$2.00 Ph \$4.00.
- OSRD 5856 PBL 58201 (4-1093)  
Alexander, M. E.  
Manufacture of wire strain gages for the measurement of pressure as applied to rocket research. Dec 1945.  
32p photos, diagrs. MI \$1.00 Ph \$3.00.
- OSRD 5857 PBL 58287 (4-584)  
Alexander, M. E.  
A-C bridge and preamplifier for strain-gage measurement of pressure and thrust. Final report, Series J, No. 1.3. Dec 1945.  
17p diagr, photos. MI \$1.00 Ph \$2.00.
- OSRD 5858 PBL 58200 (4-1066)  
Alexander, M. E.  
Two-channel ballistics camera. Dec 1945.  
21p photos, diagrs, tables. MI \$1.00 Ph \$2.00.
- OSRD 5859 PBL 34771 (3-245)  
Golden, S., and Lathrop, C. H.  
Apparatus for the recording of pressure versus Pdt. Final report. Dec 1945.  
35p diagrs, photos. MI \$1.00 Ph \$3.00.
- OSRD 5860 PBL 68915 (5-779)  
Hunt, R. E., and Avery, W. H.  
Bourdon system for pressure measurement. Final report. Dec 1945.  
24p photos, drawings, graphs. MI \$1.00 Ph \$2.00.
- OSRD 5861 PBL 11430 (1-904)  
Rosser, J. Barkely  
Theory and application of
- $$\int_0^z e^{-x^2} dx \text{ and } \int_0^y e^{-p^2 y^2} dy = \int_0^y e^{-x^2} dx$$
- Part I. Methods of computation. Series B. Final report. Nov 1945.  
223p MI \$2.50 Ph \$15.00.

- OSRD 5862 PBL 58202 (4-1176)  
Lathrop, C. H., and Alexander, N. E.  
Calibration equipment for pressure and thrust wire strain gages. Nov 1945.  
32p photos, diagrs, tables, graphs.  
MI \$1.00 Ph \$2.00.
- OSRD 5867 PBL 34782 (2-965)  
Kershner, R. B.  
Powder-driven post-hole digger. Final report. Dec 1945.  
15p drawing, photo, table. MI \$1.00 Ph \$1.00.
- OSRD 5888 PBL 34785 (2-678)  
Alexander, N. E.  
High-speed temperature-time recorders employing an electronic inverter. Final report. Nov 1945.  
18p diagrs. MI \$1.00 Ph \$2.00.
- OSRD 5889 PBL 58199 (4-955)  
Alexander, N. E.  
Standard frequency oscillators, tuning fork type. Nov 1945.  
25p photos, diagrs. MI \$1.00 Ph \$2.00.
- OSRD 5870 PBL 34788 (3-244)  
Alexander, N. E.  
Audible null indicator for 15,000-cycle/sec A-C bridge equipment. Final report. Nov 1945.  
7p diagr, photos. MI \$1.00 Ph \$1.00.
- OSRD 5871 PBL 58200 (4-1175)  
Boff, Milton R.  
Application of the optical lever principle to following projection tip-off and yaw motions during early burning of rockets. Feb 1946.  
49p photos, drawings. MI \$1.00 Ph \$4.00.
- OSRD 5872 PBL 58204 (4-1063)  
McClure, F. T., and others  
Drag of the propellant gases on the powder charge in rockets. Feb 1946.  
33p photos, diagrs, tables, graphs.  
MI \$1.00 Ph \$3.00.
- OSRD 5884 PBL 34770 (3-286)  
Gross, G. L., and Roesser, J. B.  
Exterior ballistics of the cable bomb. Final report. Jan 1946.  
32p MI \$1.00 Ph \$3.00.
- OSRD 5886 PBL 68912 (5-520)  
Beek, John, Jr., and others  
Some problems of heat transfer in rockets. Final report. May 1946.  
35p graphs, tables. MI \$1.00 Ph \$3.00.
- OSRD 5888 PBL 34772 (3-286)  
Harrington, W. J.  
Flight ballistics involved in the use of rocket-towed devices. Final report. Oct 1945.  
56p diagrs, graphs, photos, tables.  
MI \$2.00 Ph \$4.00.
- OSRD 5893 PBL 32220 (3-194)  
Beek, J., Jr., and Kincaid, J. F.  
Investigation of fiberglass laminates as materials for rocket motors. Final report, Apr 15-Nov 20, 1945. Dec 1945.  
27p diagrs, photos. MI \$1.00 Ph \$2.00.
- OSRD 5898 PBL 15844 (1-1409)  
Fischkin, V., and others  
Improvement in gun steel ingot practice (DO-34-3): Part III; Solidification of steel ingots. Final report, Jun 30, 1945. Sep 1945.  
68p curves, tables. MI \$1.00 Ph \$7.00.
- OSRD 5921 PBL 28698 (2-359)  
Quigley, J. Leslie  
0.1 mil recording photomodolite. Final report. Dec 1945.  
138p curves, diagrs, drawings, photos.  
MI \$3.00 Ph \$10.00.
- OSRD 5925 PBL 4020 (1-446)  
Wickens, D. D., and others  
Manual for instruction on mirror range estimation trainer device SC-4 (equipped with Mar 14 sight reticle) 1946.  
25p Ph \$1.00 MI \$.50.
- OSRD 5926 PBL 5080 (1-1171)  
Austin, G. R., and Gillett, H. W.  
Examination of Enemy Material (DO-113) (AC-77) (N-119). Metallurgical Examination of German Arc-Welding Electrodes. Progress report, Aug 1945. Sep 1945.  
6p MI \$.50 Ph \$1.00.
- OSRD 5927 PBL 8613 (1-804)  
Geissman, T. A.  
Oxygen carrying metallic complexes of the "Salcomine" type; to Jun 30, 1945. 1945.  
138p illus. MI \$1.50 Ph \$10.00.
- OSRD 5928 PBL 8611 (1-759)  
Air Reduction Company  
Oxygen processes. 1945.  
47p MI \$.50 Ph \$4.00.
- OSRD 5935 PBL 15841 (1-1357)  
Mahl, R. F., and others  
Improvement in gun steel ingot practice (DO-34-3): Final report. Part IV: Firing tests on seamless gun tubes with bore defects. Jun 15, 1945. Sep 1945.  
44p photos. MI \$.50 Ph \$3.00.
- OSRD 5937 PBL 20280 (2-192)  
Smith, K. U.  
A graphical recorder for synchronous linear registration of several mechanical movements. Sep 1945.  
30p diagrs, photos. MI \$.50 Ph \$2.00.
- OSRD 5938 PBL 21131 (none)  
Stephens, Olin J., II  
Final report on Sine disc propeller work done under OSRD contract OEMer-154, Sparkman and Stephens, Inc., Job No. 467. Jun 1945.  
26p MI \$.50 Ph \$1.00.
- OSRD 5940 PBL 25400 (2-230)  
Stephens, Olin J., II  
Special trailer hitch. Final report. Jun 1945.  
3p MI \$1.00 Ph \$1.00.
- OSRD 5941 PBL 21130 (none)  
Stephens, Olin, Jr., II  
Final report on proposed booster propelled landing boat under OSRD contract OEMer-154, Sparkman and Stephens, job No. 572. Jun 1946.  
2p MI \$.50 Ph \$1.00.
- OSRD 5942 PBL 25399 (2-302)  
Stephens, Olin J., II  
Final report on project "Snake." Jun 1945.  
3p MI \$1.00 Ph \$1.00.
- OSRD 5946 PBL 30759 (2-626)  
Badger, Richard M., and others  
Investigation of molecular weights and molecular weight distribution of nitrocellulose. Degradation of nitrocellulose in smokeless pow-
- ver. Viscosity, osmometry, and light scattering studies. Progress report. Nov 1945.  
85p diagrs, graphs, tables.  
MI \$2.00 Ph \$6.00.
- OSRD 5949 PBL 30758 (2-584)  
Hardy, John, and Noyes, Richard M.  
A capillary-type viscometer for use with solutions containing volatile solvents. Progress report. Oct 1945.  
13p tables. MI \$1.00 Ph \$1.00.
- OSRD 5950 PBA 30757 (2-556)  
Grossberg, Allan L., and others  
Procedures for the estimation of inorganic constituents in double base powders. Progress report Nov 1945.  
113p diagrs, graphs. MI \$3.00 Ph \$8.00.
- OSRD 5952 PBA 30768 (2-627)  
Trueblood, Kenneth M.  
Chromatographic studies of smokeless powder and related substances. III. Progress report. Nov 1945.  
85p diagr. MI \$2.00 Ph \$6.00.
- OSRD 5974 PBA 30780 (2-634)  
Wilcox, Philip E.  
New and improved synthesis of miscellaneous organic compounds. Progress report. Nov 1945.  
40p MI \$1.00 Ph \$3.00.
- OSRD 5977 PBL 33194 (3-11)  
Salzberg, P. L., and others  
Synthesis of arsenical detectors. Progress report, Sep 30, 1945. Dec 1945.  
18p tables. MI \$1.00 Ph \$2.00.
- OSRD 5978 PBA 27309 (2-554)  
Salzberg, P. L., and others  
Analogues and derivatives of BAL. Progress report to Sep 30, 1945. Jan 1946.  
25p tables, graph. MI \$1.00 Ph \$2.00.
- OSRD 5979 PBA 34802 (3-7)  
Salzberg, P. L., and others  
Protective and therapeutic agents for war gases; therapeutic agents for mustard and nitrogen mustards, II. Progress report, Sep 30, 1945. Jan 1946.  
55p tables, graphs. MI \$2.00 Ph \$4.00.
- OSRD 5981 See OSRD 4760.
- OSRD 5991 PBL 27361 (2-618)  
Becker, J. A., and others  
Development and operating characteristics of thermistor bolometers. Final report, Jul 1, 1942, to Oct 31, 1945. Oct 1945.  
178p diagrs, drawings, graphs, photos, tables. MI \$4.00 Ph \$12.00.
- OSRD 5996 PBL 27389 (2-358)  
Fairbanks, A. F.  
Adaptation of the type 10 flash lamp to the DeBrie camera. Report, Feb to Sep 1944. Oct 1946.  
18p diagrs. MI \$1.00 Ph \$2.00.
- OSRD 5997 PBL 27354 (2-571)  
Cashman, R. J.  
Development of stable thallous sulfide photoconductive cells for detection of near infrared radiation. Final report, Dec 1941 to Oct 1945. Oct 1945.  
83p diagrs, graphs. MI \$2.00 Ph \$6.00.

- OSRD 6003 PBL 27355 (2-404)  
Engstrom, Ralph W., and Glover, Alan M.  
Development of methods for manufacturing the type B thalofide cell. Final report, Apr 16 to Oct 31, 1945. Oct 1945.  
26p graphs, photos. MI \$1.00 Ph \$3.00.
- OSRD 6005 PBL 50799 (4-870)  
Coleman, Howard S., and Harding, Samuel W.  
A description of the kinetic definition chart (K.D.C.) apparatus and its uses. Oct 1945.  
67p photos, diagrs, graphs, tables.  
MI \$2.00 Ph \$5.00.
- OSRD 6006 PBL 30786 (2-535)  
Chapman, Seville  
The development of photoelectric control apparatus for high-speed anti-glare shutter to protect night vision of pilots from enemy flares. Final report. Sep 1945.  
25p diagrs. MI \$1.00 Ph \$2.00.
- OSRD 6008 PBL 21888 (1-1434)  
Greenell, L. H., and others  
Examination of enemy material: Metallurgical examination of Japanese Kasei-2i aircraft engine No. 2189. Progress report 212, Aug 27, 1945. Oct 1945.  
42p photos. MI \$.50 Ph \$3.00.
- OSRD 6009 PBL 21884 (1-1403)  
Bartholomew, E.L., Jr., and others  
Examination of enemy material: Metallurgical investigation of Japanese 81 mm. mortars. Progress report 216, Aug 31, 1945. Sep 1945.  
17p photos. MI \$.50 Ph \$2.00.
- OSRD 6010 PBL 21883 (1-1423)  
Bartholomew, E.L., Jr., and others  
Examination of enemy material: Metallurgical investigation of a Japanese 15 mm. howitzer. Progress report 217, Aug 31, 1945. Sep 1945.  
30p drawings, graphs, photos, tables.  
MI \$.50 Ph \$2.00.
- OSRD 6012 PBL 4236 (1-321)  
Standard Oil Development Company  
Development and field use of E7-7 mechanized flame thrower. 1945.  
26p illus. Ph \$2.00 MI \$.50.
- OSRD 6014 PBL 4191 (1-442)  
Standard Oil Development Company  
Development of mobile servicing equipment for mechanized flame throwers. 1945.  
40p illus. MI \$.50 Ph \$4.00.
- OSRD 6015 PBL 28829 (2-296)  
Croft, H.O., and others  
Design of mechanized flame thrower in MIA3 tank retaining 76 mm. gun. Final report. Sep 1945.  
79p drawings, photos. MI \$2.00 Ph \$6.00.
- OSRD 6018 PBL 28522 (2-613)  
Harvard University, Optical Research Laboratory  
Spherically symmetrical lenses and associated equipment for wide angle aerial photography. Nov 1945.  
118p MI \$3.00 Ph \$8.00.  
See also PB 28539.
- OSRD 6017 PBL 63654 (5-305)  
Harvard University, Optical Research Laboratory  
Design and development of an automatically focusing 40-inch f/5.0 distortionless telephoto and related lenses for high altitude aerial reconnaissance. Dec 1945.  
260p photos, drawings, tables. MI \$6.00 Ph \$18.00.  
A rectograph and viewer are included which will not reproduce well.
- OSRD 6018 PBL 63656 (5-309)  
Harvard University, Optical Research Laboratory  
Design and development of several types of 7-inch f/2.5 lenses for night photography. Dec 1945.  
62p photos, drawings. MI \$2.00 Ph \$5.00.
- OSRD 6019 PBL 63655 (5-305)  
Harvard University, Optical Research Laboratory  
Design and development of an 100-inch f/10 anastigmat for aerial reconnaissance at extreme altitudes. Dec 1945.  
34p graphs, tables. MI \$1.00 Ph \$3.00.
- OSRD 6020 PBL 28693 (2-304)  
Dunham, Theodore, Jr.  
Report on achromatic photographic aerial lenses and other optical instruments making use of synthetic fluorite. Dec 1945.  
92p diagrs, graphs, photos, tables.  
MI \$2.00 Ph \$7.00.
- OSRD 6021 PBL 28694 (2-304)  
Dunham, Theodore, Jr.  
Report on design and development of lenses for rectification of Nitrogen high obliques. Dec 1945.  
56p drawings, graphs, photos, tables.  
MI \$2.00 Ph \$4.00.
- OSRD 6022 PBL 51030 (4-972)  
Harvard University, Optical Research Laboratory  
Report on development of an aircraft periscope (Mark 35, model 0), and of an experimental range finder for anti-submarine aerial patrol planes. Dec 1945.  
26p photos, diagrs, tables. MI \$1.00 Ph \$2.00.  
See also PB 28523 and PB 16447.
- OSRD 6024 PBL 28692 (2-304)  
Dunham, Theodore, Jr.  
Report on a device for testing the flatness of film in the A-5 and A-7 magazines under service conditions. Dec 1945.  
12p drawings, photo. MI \$1.00 Ph \$1.00.
- OSRD 6025 PBL 30784 (2-613)  
Harvard University, Optical Research Laboratory  
Design and development of a 36-inch f/8.0 telephoto for the K-18 camera. Dec 1945.  
71p tables, photos, drawings. MI \$2.00 Ph \$5.00.
- OSRD 6027 PBL 63653 (5-305)  
Harvard University, Optical Research Laboratory  
Miscellaneous projects for instructional and laboratory purposes. Dec. 1945.  
45p photo, drawings, tables. MI \$1.00 Ph \$3.00.
- OSRD 6028 PBL 63657 (5-305)  
Harvard University, Optical Research Laboratory  
Quantitative studies and observations of factors limiting resolution of aerial photographs. Part I: Flight data and test equipment. Dec 1946.  
254p photos, diagrs, drawings, graphs, tables. MI \$8.00 Ph \$17.00.
- OSRD 6030 PBL 51029 (4-974)  
Rochester, University, Institute of Optics  
Wide field F/I camera lens. Sep 1945.  
19p photos, drawings, graphs. MI \$1.00 Ph \$2.00.
- OSRD 6031 PBL 40540 (3-423)  
Rochester, University, Institute of Optics  
Tank periscope binocular (T-9). Sep 1945.  
24p photos, drawings. MI \$1.00 Ph \$2.00.
- OSRD 6032 PBL 63658 (5-306)  
Rochester, University, Institute of Optics  
Development of special reflex gun sights. Sep 1945.  
55p photos, drawings, graphs. MI \$2.00 Ph \$4.00.
- OSRD 6033 PBL 63652 (5-306)  
Rochester, University, Institute of Optics  
Wide field telescopes. Oct 1945.  
38p photos, drawings, graphs. MI \$1.00 Ph \$3.00.
- OSRD 6034 PBL 51027 (4-974)  
Rochester, University, Institute of Optics  
Anti-oscillation mount tests. Oct 1945.  
32p photos, graphs. MI \$1.00 Ph \$3.00.  
See also PB 28608 and PB 28635.
- OSRD 6036 PBL 51028 (4-1068)  
Rochester, University, Institute of Optics  
Anti-oscillation mounted high-power telescopes. Oct 1945.  
10p photos, drawing. MI \$1.00 Ph \$1.00.
- OSRD 6037 PBL 63651 (5-306)  
Rochester, University, Institute of Optics  
P-80 periscope design. Oct 1945.  
8p drawings, tables. MI \$1.00 Ph \$1.00.
- OSRD 6039 PBL 30789 (2-536)  
Singleton, Robert  
Test of rectification and plotting of a pair of high oblique photographs. Oct 1945.  
40p photos, drawing. MI \$1.00 Ph \$3.00.
- OSRD 6042 PBL 5920 (1-1175)  
Beckman, Arnold O., and others  
The stainless-steel propane injector: Progress report to Feb 28, 1945. Sep 1945.  
15p diagrs, graphs. MI \$.50 Ph \$1.00.
- OSRD 6043 PBA 5921 (1-532)  
Beckman, Arnold O., and others  
Determination of carbon monoxide in air, to Feb 28, 1945. 1945.  
111p illus. MI \$1.50 Ph \$8.00.
- OSRD 6044 PBL 5947 (1-452)  
Beckman, Arnold O., and others  
An instrument for the continuous automatic recording of H concentrations in air. 1945.  
39p illus. MI \$.50 Ph \$3.00.
- OSRD 6045 PBL 5923 (1-379)  
Briglio, A., Jr., and others  
A recording field sight. 1945.  
61p illus. MI \$1.00 Ph \$7.00.
- OSRD 6046 PBL 5924 (1-380)  
Farrington, P.S., and others  
A syringe microburst. 1945.  
40p illus. Ph \$3.00 MI \$.50.

## Bibliography

- OSRD 6047 PBL 5925 (I-312)  
Briglio, A., Jr., and others  
A semivariable air pump. 1945.  
123p Ph \$8.00 Mi \$1.50.
- OSRD 6048 PBL 5926 (I-471)  
Sease, John M.  
The electrolytic titration of H<sub>2</sub> using polarized platinum indicator electrodes. 1945.  
5ip illus. Ph \$4.00 Mi \$1.00.
- OSRD 6051 PBA 5922 (I-508)  
Williams, Jonathan W.  
Summary report on synthesis of compounds for studies of lubricants and hydraulic fluids, to July 1, 1945. 1945.  
29p Ph \$2.00 Mi \$.50.
- OSRD 6052 PBL 8601 (I-605)  
Holst, Karl A.  
Production of salcomine and related compounds, to September 4, 1945. 1945.  
28p Mi \$.50 Ph \$2.00.
- OSRD 6054 PBA 24903 (2-625)  
Reed, W. B., and others  
Preparation of sodium fluoroacetate, compound 1080. Progress report, Sep 30, 1945. Oct 1945.  
46p flow chart, diagr. Mi \$.50 Ph \$4.00.
- OSRD 6055 PBL 11956 (I-1065)  
U. S. Tropical Deterioration Administrative Committee  
Prevention of deterioration of optical instruments in the tropics. Oct 1945.  
6ip Mi \$1.00 Ph \$.50.
- OSRD 6056 PBL 11959 (I-1066)  
U. S. Tropical Deterioration Administrative Committee  
Methods of testing biological deterioration of service materials. Report. Oct 1945.  
68p Mi \$1.00 Ph \$.50.
- OSRD 6059 PBA 5946 (I-452)  
Brown, Weldon G.  
Cyclonic analyzer for particulate sampling. 1945.  
8p illus. Mi \$.50 Ph \$1.00.
- OSRD 6061 PBA 5946 (I-470)  
Brown, Weldon G., and others  
Estimation of small quantities of DDT by the phosgene method, to September, 1945. 1945.  
14p illus. Mi \$.50 Ph \$1.00.
- OSRD 6067 PBL 11957 (I-678)  
Brown, A. E.  
The problem of fungal growth on synthetic resins, plastics and plasticizers. Oct 1945.  
54p Mi \$1.00 Ph \$.50.
- OSRD 6071 PBL 20184 (I-1345)  
Curtis, J. A., and Lucks, C. F.  
Test methods of the Materials Laboratory, Engineering Division, Air Technical Service Command, Wright Field, Dayton, Ohio: Advisory report, Part III, Routine chemical analysis methods of the Physics Branch. Oct 1945.  
83p photos, diagrs. Mi \$1.00 Ph \$.50.
- OSRD 6072 PBA 20185 (I-1328)  
Lucks, C. F.  
Test methods of the Materials Laboratory Engineering Division, Air Technical Service Command, Wright Field, Dayton, Ohio: Advisory report, Part IV, Test methods of the Wood and Glue Branch. Oct 1945.  
38p photos, drawings. Mi \$.50 Ph \$3.00.
- OSRD 6073 PBL 19937 (I-1344)  
Banta, H. M., and others  
Investigation of metallurgical quality of steels used for hull construction (Ns-255): Progress report, Jul 15, 1945. Oct 1945.  
90p Mi \$1.00 Ph \$.50.
- OSRD 6074 PBL 20197 (I-1377)  
Combs, E. L., and Lucks, C. F.  
Test methods of the Materials Laboratory, Engineering Division, Air Technical Service Command, Wright Field, Dayton, Ohio: Advisory report, Part V, Electro-chemical methods of the Chemical Branch. Oct 1945.  
40p photos, drawings. Mi \$.50 Ph \$3.00.
- OSRD 6075 PBL 19936 (I-1344)  
Banta, H. M., and others  
Investigation of metallurgical quality of steels used for hull construction: Final report, Aug 15, 1945. Oct 1945.  
43p Mi \$.50 Ph \$3.00.
- OSRD 6086 PBA 27395 (2-630)  
Adkins, Homer, and others  
The preparation of miscellaneous chemical warfare agents. Progress report to Jun 1945. Dec 1945.  
37p Mi \$1.00 Ph \$3.00.
- OSRD 6088 PBA 15642 (I-955)  
Grinnell, S. W.  
Some instruments used by Division 10, NDRC at Dugway Proving Ground for the continuous recording of micrometeorological conditions. (Progress report) October 1, 1945. Oct 1945.  
54p diagrs. Mi \$1.00 Ph \$4.00.
- OSRD 6098 PBL 30783 (2-616)  
Wagman, Irving H.  
A study of pupil size at low levels of illumination. Oct 1945.  
23p graphs, photos, tables. Mi \$1.00 Ph \$2.00.
- OSRD 6099 PBL 66206 (5-304)  
Hartline, H. K., and others  
Physiological factors determining the performance of night binoculars. Oct 1945.  
100p Mi \$.20 Ph \$7.00.
- OSRD 6100 PBL 28520 (2-511)  
Aero Service Corp.  
Manual on the pinhole rectifying camera, Oct 1945.  
13p photos, sketches. Mi \$1.00 Ph \$1.00.
- OSRD 6101 PBL 28521 (2-511)  
Aero Service Corp.  
Manual on the variable ratio printer, Oct 1945.  
24p drawings, photos. Mi \$1.00 Ph \$2.00.
- OSRD 6102 PBL 40544 (3-493)  
Aero Service Corp.  
Report on airplane photographic tests of lenses, film and filters for oblique photography suitable for mapping purposes. Oct 1945.  
12p table. Mi \$1.00 Ph \$1.00.
- OSRD 6103 PBL 40542 (3-493)  
Coleman, Howard S.  
Report on optical inspection. Oct 1945.  
232p photos, drawings, diagrs, tables. Mi \$6.00 Ph \$16.00.
- OSRD 6104 PBL 16446 (I-1043)  
Coleman, Howard S., and Coleman, Madeline F.  
The NDRC optical inspection project at the Pennsylvania State College for the period of October 1943 to November 1945. Oct 1945.  
24p Mi \$.50 Ph \$2.00.
- OSRD 6105 PBL 16461 (I-1043)  
Coleman, Howard S.  
The dioprometer and its use in the inspection of optical instruments. Oct 1945.  
29p diagrs, photos. Mi \$.50 Ph \$2.00.
- OSRD 6106 PBL 16462 (I-1012)  
Coleman, Howard S., and Clark, David G.  
The Penn State I-I Michelson-Twymen Interferometer and its use in determining conformance with design and in quality control of lenses, prisms, and telescopic systems. Oct 1945.  
68p photos, diagrs. Mi \$1.00 Ph \$5.00.
- OSRD 6107 PBL 40541 (3-493)  
Coleman, Howard S., and Clark, David G.  
Photoelectric and photographic procedures for the evaluation of optical instrument design. Oct 1945.  
32p photos, diagrs, graphs. Mi \$1.00 Ph \$3.00.
- OSRD 6108 PBL 43058 (3-658)  
Coleman, Howard S., and Harding, Samuel W.  
Notes on the scattering of light in optical fire control instruments. Oct 1945.  
56p photos, diagrs, graphs. Mi \$2.00 Ph \$4.00.
- OSRD 6110 PBL 13289 (I-823)  
Conrad, Herbert S.  
Summary report on research and development of the Navy's aptitude testing program. Final report (September 1, 1942-October 31, 1945). Oct 1945.  
79p Mi \$1.00 Ph \$6.00.
- OSRD 6112 PBL 39577 (3-705)  
Cunningham, W. J., and Licklider, J.C.R.  
A two-carrier system for radio communication. Oct 1945.  
20p photos, diagrs, graphs. Mi \$1.00 Ph \$2.00.
- OSRD 6113 PBL 22851 (2-186)  
Shaw, W. A.  
Measurements of insulation and sensitivity of service headsets. Oct 1945.  
13ip diagrs, graphs, tables. Mi \$1.50 Ph \$9.00.
- OSRD 6114 PBL 4019 (I-555)  
Voss, H. A., and Wickens, D. D.  
A comparison of free and stadiometric estimation of opening range. 1945.  
34p Mi \$.50 Ph \$3.00.
- OSRD 6119 PBL 5943 (I-475)  
Brown, David H., and Bennett, Edward L.  
The collection and separation of samples of persistent agents from contaminated materials other than air. 1945.  
89p Ph \$6.00 Mi \$1.00.

## Bibliography

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- OSRD 6122 PBL 32217 (2-743)  
Ford, E. A.  
Design of a plant for manufacturing and loading plasticized white phosphorus. Progress report. Oct 1945.  
175p diagrs. MI \$4.00 Ph \$12.00.
- OSRD 6128 PBL 28700 (2-304)  
Miller, Carl W., and Beck, Lloyd H.  
The effects of night binocular design features on the visibility of targets at low levels of illumination. Oct 1945.  
103p graphs, photos, tables.  
MI \$3.00 Ph \$7.00.  
For supplement see PB 28701.
- OSRD 6129 PBL 28701 (2-305)  
Miller, Carl W., and Beck, Lloyd H.  
Summary of experimental data, a supplement to OSRD report No. 6128 entitled: The effects of night binocular design features on the visibility of targets at low levels of illumination. Oct 1945.  
169p tables. MI \$4.00 Ph \$12.00.
- OSRD 6132 PBL 32221 (3-195)  
Droulard, M. R., and others  
Rockets for cast propellants. Final report. Dec 1945.  
38p drawings, photos. MI \$1.00 Ph \$3.00.
- OSRD 6134 PBL 28528 (2-885)  
Droulard, M. R., and others  
Rocket launchers. Final report. Oct 1945.  
46p photos, diagrs, tables.  
MI \$1.00 Ph \$4.00.
- OSRD 6135 PBL 34779 (2-885)  
Droulard, M. R., and others  
Rocket flares. Final report. Oct 1945.  
28p drawings, photos, tables.  
MI \$1.00 Ph \$2.00.
- OSRD 6147 PBL 34787 (2-885)  
Droulard, M. R., and others  
Rocket powder traps. Final report. Oct 1945.  
105p drawings, photos, tables.  
MI \$3.00 Ph \$7.00.
- OSRD 6152 PBL 34788 (3-266)  
Droulard, M. R., and others  
Miscellaneous development of rockets and accessories. Final report. Oct 1945.  
131p photos, diagrs, drawings.  
MI \$3.00 Ph \$9.00.
- OSRD 6154 PBL 34789 (4-12)  
Avella, S. R.  
Engineering and material services. Final report. Jan 1946.  
23p diagrs, photos. MI \$1.00 Ph \$2.00.
- OSRD 6156 PBL 34791 (2-885)  
Dietz, J. H., and others  
Launchers and improved components for 4.5 in. rockets. Final report. Feb 1946.  
186p drawings, photos. MI \$4.00 Ph \$13.00.
- OSRD 6157 PBL 28527 (2-614)  
McNair, F. L., and Reck, F.  
Development of ribbon frame camera. Final report. Dec 1945.  
27p drawings, photos. MI \$1.00 Ph \$2.00.
- OSRD 6159 PBL 34792 (2-884)  
Burns, R.
- Powder trapping and the extrusion of rocket powders. Final report. Jan 1946.  
50p diagrs, photos, tables.  
MI \$1.00 Ph \$4.00.
- OSRD 6160 PBL 28525 (2-518)  
Townsend, J. R.  
The development, annealing and calibrating of copper target balls. Final report. Jan 1946.  
55p photos, drawings, tables.  
MI \$2.00 Ph \$4.00.
- OSRD 6161 PBL 28526 (2-879)  
Dunlap, K. S.  
Development of apparatus for recording pressure versus integral of pressure. Final report. Dec 1945.  
23p photos, diagrs. MI \$1.00 Ph \$2.00.
- OSRD 6163 PBL 28524 (2-962)  
Garvin, J. S.  
Design and production of amplifier calibrators. Final report. Dec 1945.  
25p diagrs, photos. MI \$1.00 Ph \$2.00.
- OSRD 6165 PBL 34777 (2-884)  
Buch, P. E.  
Airborne flame thrower firing circuits. Final report. Jan 1946.  
33p drawings, photos. MI \$1.00 Ph \$3.00.
- OSRD 6167 PBL 34778 (2-884)  
Buch, P. E.  
Tankborne flame thrower firing circuits. Final report. Jan 1946.  
24p diagrs, photos. MI \$1.00 Ph \$2.00.
- OSRD 6168 PBL 34790 (2-883)  
Baker, W. O., and Pape, W. R.  
X-ray diffraction photograph investigations of sheet powder. Final report. Dec 1945.  
23p graph. MI \$1.00 Ph \$2.00.
- OSRD 6177 PBL 4458 (I-405)  
Rogers, M. H., and others  
History and final report of project NR-106, Applied psychology panel. 1946.  
24p MI \$.50 Ph \$2.00.
- OSRD 6179 PBL 22852 (2-87)  
Shaw, W. A., and Yates, D. E.  
Development of insert tips for use with miniature earphones. Oct 1945.  
30p photos, graphs, tables, drawings.  
MI \$.50 Ph \$2.00.
- OSRD 6182 PBL 5942 (I-580)  
Moritz, A. R., and Henriques, F. C.  
An experimental investigation of the physiological mechanisms concerned in the production of casualties by flame thrower attack, to October 1, 1945. 1945.  
27p illus. MI \$.50 Ph \$2.00.
- OSRD 6183 PBL 5940 (I-379)  
Briglio, Anthony, Jr., and others  
An automatic recording titrimeter for mustard. 1945.  
260p illus. Ph \$18.00 MI \$3.00.
- OSRD 6184 PBL 5951 (I-379)  
Brockman, J. A., Jr., and others
- Constructional details of certain apparatus required for the laboratory identification of CW agents. 1945.  
95p illus. MI \$1.00 Ph \$7.00.
- OSRD 6187 PBL 58229 (4-864)  
Gulf Research and Development Co., Pittsburgh  
Experimental investigations in connection with high-angle dirigible bombs: RAZON (VB-3) bomb. Progress report, May 1, 1944 to Apr 1, 1945. Apr 1945.  
169p tables, graphs, photos, drawings.  
MI \$4.00 Ph \$12.00.  
See also PB 58228.
- OSRD 6190 PBL 4190 (I-370)  
Byfield, A., and others  
Flame throwers, incendiaries and their evaluation. 1945.  
88p MI \$1.00 Ph \$6.00.
- OSRD 6200 PBL 16445 (I-1389)  
Nethercot, A. H., Jr., and Huxford, W. S.  
Contractor's report on German Lichtsprecher 250/130 (Voice transmission on light beam). Oct 1945.  
21p diagrs, photos, tables.  
MI \$.50 Ph \$2.00.
- OSRD 6201 PBL 40545 (3-491)  
Van Lear, G. A., Jr.  
Cloud attenuation studies, Mount Washington, N. H. Final report, Jul 1943-Aug 1944. Oct 1945.  
36p photos, diagrs, map, tables.  
MI \$1.00 Ph \$3.00.
- OSRD 6202 PBL 58236 (4-1062)  
Doll, H. G., and others  
Anti-rotational stabilizer. Sep 1945.  
27p graphs, diagrs. MI \$1.00 Ph \$2.00.
- OSRD 6204 PBL 19792 (I-1249)  
Gensamer, H., and others  
Correlation of laboratory tests with full scale ship plate fracture tests (NS-336): Final report.  
54p tables, graphs, diagrs.  
MI \$1.00 Ph \$4.00.
- OSRD 6205 PBL 19572 (I-1504)  
Sachs, George, and others  
Correlation of information available on the fabrication of aluminum alloys (Na-126): Final report. Section V, Formability of aluminum alloys for use in military aircraft: Part VII, Experimental strain analysis of bent rectangular shapes. Oct 1945.  
52p photos. MI \$1.00 Ph \$4.00.
- OSRD 6208 PBL 5944 (I-470)  
Salzberg, P. L., and others  
DDT formulations—spreading agents for larvicultural oils on water, to February 1, 1945.  
13p Ph \$1.00 MI \$.50.
- OSRD 6217 PBL 19788 (I-1509)  
Du Pont de Nemours, E. I., and Explosives Dept. Burnside Laboratory  
Thermochanical studies of special propellants. Jan 1946.  
25p diagrs, tables. MI \$.50 Ph \$2.00.
- OSRD 6218 PBL 11968 (I-714)  
Offenhauser, William H., Jr., and others  
Summary report—subcommittee on photographic equipment and supplies. 1945.  
35p MI \$.50 Ph \$1.00.

## Bibliography

- OSRD 6221 PBL 58230 (4-865)  
Gulf Research and Development Co., Pittsburgh  
Experimental investigations in connection  
with high-angle dirigible bombs: VB-3 ballistic  
data. Progress report, Apr 1, 1945 to Sep  
1, 1945. Sep 1945.  
96p tables, graphs, photos. Mi \$2.00 Ph  
\$7.00.
- OSRD 6224 PBA 5898 (I-633)  
Johnston, Harold S., and others  
A field instrument for the determination of  
the rate of vaporization of organic liquids, to  
Sept. 20, 1945. 1945.  
14p illus. Ph \$1.00 Mi \$.50.
- OSRD 6226 PBA 5897 (I-347)  
Salzberg, P. L., and others  
DDT formulations—solvents of high solution  
capacity. 1945.  
13p Ph \$1.00 Mi \$.50.
- OSRD 6233 PBL 15808 (I-1066)  
Bennett, G. K.  
Development of Morse Code actuated printer.  
Report No. I. Oct 1945.  
30p photos. Mi \$.50 Ph \$2.00.
- OSRD 6234 PBL 21115 (I-1484)  
McMillen E. L., and Carver, E. K.  
The mechanized Gardner mobilometer. Oct  
1945.  
24p photos, tables. Mi \$.50 Ph \$2.00.
- OSRD 6235 PBL 9393 (I-630)  
The Texas Company  
Development of 40 lb. oil incendiary bomb,  
E9. 1945.  
253p illus. Mi \$3.00 Ph \$17.00.
- OSRD 6236 PBL 28628 (2-436)  
Bauer, E. E., and Carver, E. K.  
Studies of thickened liquids, and miscellaneous  
flame thrower problems. Final report.  
Oct 1945.  
13p Mi \$1.00 Ph \$1.00.
- OSRD 6237 PBA 8336 (I-627)  
Brock, G. C., and Orr, A. G.  
Aluminum cresylate from petroleum cresylic  
acids. 1945.  
23p Mi \$.50 Ph \$2.00.
- OSRD 6238 PBL 21110 (I-1403)  
Cole, R. H., and others  
Electrical instruments for study of under-  
water explosions and other transient phenomena.  
Nov 1945.  
68p Mi \$1.00 Ph \$5.00.
- OSRD 6251 PBL 60930 (4-1051)  
Fraenkel, G. K.  
Apparatus for the measurement of air-blast  
pressures by means of piezoelectric gauges.  
Mar 1946.  
229p photos, diagrs. Mi \$5.00 Ph \$16.00.
- OSRD 6256 PBL 33262 (2-879)  
Frondel, Clifford  
Construction of tourmaline gauges for piezo-  
electric measurement of explosion pressure  
waves. Jan 1946.  
36p photos. Mi \$1.00 Ph \$3.00.
- OSRD 6262 PBL 20196 (I-1444)  
Lucks, C. F.  
Test methods of the Materials Laboratory,  
Engineering Division, Air Technical Service
- Command, Wright Field, Dayton, Ohio: Advisory  
report, Part VI, Physical test methods of the  
Physics Branch. Oct 1945.  
60p Mi \$1.00 Ph \$5.00.
- OSRD 6263 PBL 20199 (I-1499)  
Doan, Gilbert E.  
Weldability of steel for hull construction  
(NS-255): Final report, Aug 31, 1945. Oct 1945.  
47p photos, graphs, tables. Mi \$.50 Ph \$4.00.
- OSRD 6264 PBL 20195 (I-1408)  
Lucks, C. F.  
Test methods of the Materials Laboratory,  
Engineering Division, Air Technical Service  
Command, Wright Field, Dayton, Ohio: Advisory  
report, Part VII, Test methods of the Welding  
Branch. Oct 1945.  
31p photos, drawings. Mi \$.50 Ph \$3.00.
- OSRD 6266 PBL 4018 (I-446)  
Viteles, M. S., and others  
History and final report of Project M-105,  
Applied Psychology Panel. 1946.  
44p Mi \$.50 Ph \$3.00.
- OSRD 6267 PBL 11957 (I-1064)  
Shanor, Leland  
Handbook of some fungi associated with trop-  
ical deterioration. Oct 1945.  
85p illus. Mi \$1.00 Ph \$7.00.
- OSRD 6269 PBA 5941 (I-477)  
Cohen, Barnett  
Summary report on "kinetics of the reactions  
of the sulfur and nitrogen mustards," to Sep-  
tember 1, 1945.  
61p Ph \$5.00 Mi \$1.00.
- OSRD 6271 PBL 19656 (I-1425)  
Smith, Lincoln G.  
Photographic investigation of the reflection  
of plane shocks in air; Final report. Nov 1945.  
144p photos, curves. Mi \$1.50 Ph \$10.00.
- OSRD 6280 PBL 39572 (3-640)  
U. S. Office of Scientific Research and  
Development  
Final reports—Part III, on contract OEMar-  
1441. Dec 1945.  
144p photos, diagrs, charts, curves. Mi  
\$3.00 Ph \$10.00.
- OSRD 6284 PBL 27419 (2-980)  
Ling, D. P.  
Aerial gunnery and gyro sights: A manual  
for gunners. Oct 1945.  
64p diagrs. Mi \$2.00 Ph \$5.00.
- OSRD 6285 PBL 34121 (3-200)  
U. S. National Defense Research Commission  
On a modified internal adjuster system for  
stereoscopic rangefinders. Sep 1945.  
18p drawings, graphs, tables. Mi \$1.00 Ph  
\$2.00.
- OSRD 6292 PBL 19811 (2-176)  
Flynn, J. P., and others  
Auditory factors in the discrimination of  
radio range signals: Collected informal reports  
(relevant to service control No. NA-105) Dec  
1945.  
83p diagrs, photos, tables, graphs. Mi  
\$1.00 Ph \$6.00.
- OSRD 6297 PBL 33263 (3-43)  
Neumann, J. von, and Taub, A. H.  
Flying wind tunnel experiments. Nov 1945.  
18p drawings, photos. Mi \$1.00 Ph \$2.00.
- OSRD 6299 PBL 50828 (4-401)  
Allegany Ballistic Laboratory, Cumberland, Md.  
Program of events for press day at ABL; Nov  
8, 1945, and memorandum describing laboratory  
facilities and developments. 1945.  
21p chart, photos. Mi \$1.00 Ph \$2.00.
- OSRD 6301 PBA 20836 (2-313)  
LeTourneau, R. L., and others  
Development of an exhaust DDT aerosol gener-  
ator for the t ton, 4 x 4 truck, "Jeep." Nov  
1945.  
41p Mi \$.50 Ph \$3.00.
- OSRD 6302 PBL 8608 (I-758)  
Bliss, H., and Dodge, B. F.  
Experimental study of special equipment for  
use in low temperature cycles for the produc-  
tion of liquid and gaseous oxygen. Final Report  
to July 1, 1945. 1945.  
73p illus. Mi \$1.00 Ph \$5.00.
- OSRD 6303 PBL 58239 (5-14)  
Silverman, S. R., and others  
Tolerance for pure tones and speech in  
normal and hard-of-hearing ears. Jul 1946.  
97p tables, graphs, diagr. Mi \$2.00 Ph \$7.00.
- OSRD 6306 PBL 63635 (5-309)  
Stone, A. H.  
The aerodynamics of a slightly yawing super-  
sonic cone. Jul 1945.  
44p diagrs, graph, tables. Mi \$1.00 Ph \$3.00.
- OSRD 6310 PBL 22853 (2-169)  
Veneklasen, P. S., and Miller, J.  
Microphones, earphone cushions and handsets  
for special applications. Oct 1945.  
107p diagrs, graphs, photos. Mi \$1.50 Ph  
\$8.00.
- OSRD 6311 PBL 22854 (2-165)  
Nichols, R. H., Jr., and others  
Collected informal reports on the perform-  
ance of special communication equipment. Oct  
1945.  
56p tables, graphs. Mi \$1.00 Ph \$4.00.
- OSRD 6317 PBL 33281 (2-879)  
Lang, H. M., and Silverman, D.  
Development of blast-pressure gauges and  
recording equipment: II. Final report. Nov  
1945.  
15p diagrs, drawings, tables. Mi \$1.00 Ph  
\$1.00.
- OSRD 6318 PBL 33260 (2-887)  
Markward, W. M., and others  
Construction and characteristics of model  
ammunition storage magazines. Final report.  
Nov 1945.  
27p photos, diagrs, tables. Mi \$1.00 Ph  
\$2.00.
- OSRD 6320 PBL 21113 (I-1403)  
Smith, Lincoln G.  
A condenser-type FM gauge for blast-pressure  
measurements. Jan 1946.  
19p drawings, diagrs. Mi \$.50 Ph \$2.00.
- OSRD 6321 PBL 43051 (3-715)  
Fletcher, J. C., and others  
Shock tube, piezoelectric gauges, and record-  
ing apparatus. Final report. Feb 1946.  
77p Mi \$2.00 Ph \$6.00.

## Bibliography

73

- OSRD 6323 PBA 34801 (3-10)  
Kaiser, D. W.  
Preparation of various types of amides and amidines and an investigation of the chlorinated derivatives thereof. Final report, Feb 7, 1944. Nov 1945.  
26p Mi \$2.00 Ph \$4.00.
- OSRD 6324 PBL 11955 (I-1064)  
U. S. Tropical Deterioration Administrative Committee  
The effect of moisture and fungus on electrical and mechanical properties of plastic insulating materials. Final report. Oct 1945.  
24p Mi \$.50 Ph \$2.00.
- OSRD 6325 PBM 5948 (I-495)  
Anslow, William P., Jr., and others  
Summary report on "The systemic pharmacology and pathology of the sulfur and nitrogen mustards," to October 1, 1945. 1945.  
151p Mi \$2.00 Ph \$11.00.
- OSRD 6330 PBL 58234 (4-980)  
Douglas Aircraft Co., Inc., Santa Monica, Calif.  
Report on design and development of the ROC 00-1000, serial No. 1 to No. 20. Jun 1945.  
380p tables, photos, graphs, drawings, diagrs. Mi \$8.00 Ph \$24.00.
- OSRD 6331 PBL 19571 (I-1504)  
Sachs, George, and others  
Correlation of information available on the fabrication of aluminum alloys (NA-126): Final report Section V, Formability of aluminum alloys for use in military aircraft: Part VIII, Combined bending and tension of rectangular bars. Nov 1945.  
46p Mi \$.50 Ph \$4.00.
- OSRD 6332 PBL 19579 (I-1411)  
Sachs, George, and others  
Correlation of information available on the fabrication of aluminum alloys (NA-126): Final report. Section V, Formability of aluminum alloys for use in military aircraft: Part IX, Bending of T-sections. Nov 1945.  
32p photos. Mi \$.50 Ph \$3.00.
- OSRD 6333 PBL 24885 (2-304)  
Hill, G. Albert, and others  
Apparatus and methods for the study of photoflash bomb explosions. Final report. Nov 1945.  
48p diagrs. graphs, photos. Mi \$.50 Ph \$4.00.
- OSRD 6334 PBA 27400 (2-489)  
Salzberg, P. L., and others  
DDT formulations—water-dispersible powders. Progress report to Oct 31, 1945. Feb 1946.  
88p tables. Mi \$2.00 Ph \$6.00.
- OSRD 6335 PBA 27401 (2-489)  
Salzberg, P. L., and others  
DDT formulations—water-dispersible pastes. Progress report to Jan 31, 1945. Jan 1946.  
27p tables. Mi \$1.00 Ph \$2.00.
- OSRD 6336 PBA 27402 (2-625)  
Salzberg, P. L., and others  
DDT formulations—surface-active agents for emulsifiable DDT concentrates. Progress report to Feb 1, 1945. Nov 1945.  
18p tables. Mi \$1.00 Ph \$2.00.
- OSRD 6337 PBA 27403 (2-401)  
Salzberg, P. L., and others
- DDT formulations—applications of infrared spectroscopy to DDT. Progress report to Oct 31, 1945. Jan 1946.  
21p graphs. Mi \$1.00 Ph \$2.00.
- OSRD 6338 PBA 33195 (3-8)  
Salzberg, P. L., and others  
Miticides—Fixation on cotton fabric. Progress report, Aug 16, 1945. Jan 1946.  
19p tables. Mi \$1.00 Ph \$2.00.
- OSRD 6339 PBA 27404 (2-391)  
Salzberg, P. L., and others  
Emulsifiable concentrates for fly and odor control. Progress report to Aug 1, 1945. Dec 1945.  
13p Mi \$1.00 Ph \$1.00.
- OSRD 6340 PBA 27405 (3-79)  
Salzberg, P. L., and Patterson, G. D.  
DDT formulations. Final report, Oct 31, 1945. Feb 1946.  
26p Mi \$1.00 Ph \$2.00.
- OSRD 6341 PBL 15840 (I-1294)  
Rouse, Hunter  
Part I: Wind-tunnel studies of fog-dispersal methods. Part II: Wind-tunnel studies of gas diffusion in urban districts. Part III: Wind-tunnel studies of air flow over mountainous terrain. Nov 1945.  
10p Mi \$.50 Ph \$1.00.
- OSRD 6344 PBA 32212 (2-859)  
Rice, R. I.  
The development of an exhaust DDT aerosol generator for the Taylorcraft light airplane. Progress report. Nov 1945.  
23p photos, diagrs. Mi \$1.00 Ph \$2.00.
- OSRD 6345 PBL 20837 (2-79)  
Lewis, H. C., and others  
A study of the atomization of liquids. Nov 1945.  
84p Mi \$1.00 Ph \$5.00.
- OSRD 6354 PBL 58231 (4-884)  
Gulf Research and Development Co., Pittsburgh  
Experimental investigations in connection with high-angle dirigible bombs: Calculated RAZOM (VB-3) trajectories. Progress report, Sep 1, 1945 to Oct 15, 1945. Oct 1945.  
88p tables, graphs. Mi \$2.00 Ph \$8.00.
- OSRD 6356 PBL 28622 (2-432)  
Collins, A. S., and others  
Development of a portable front-line gas generator for pressurizing portable flame throwers. Final report. Nov 1945.  
113p Mi \$3.00 Ph \$8.00.
- OSRD 6357 PBA 5849 (I-478)  
Hamilton, C. S., and others  
Syntheses of benzquinoline derivatives and certain antimalarial intermediates, to August 31, 1945. 1945.  
63p Mi \$1.00 Ph \$5.00.
- OSRD 6358 PBL 19857 (I-1544)  
Bartik, M. J., and others  
Investigations of the measurement of noise: Final report. Oct 1945.  
32p Mi \$.50 Ph \$3.00.
- OSRD 6359 See OSRD 4866.
- OSRD 6365 PBL 19944 (I-1345)  
Davis, Harmer E., and others
- Behaviour of steel under multi-axial stress, as determined by tests of large tubular specimens (ship-plate series): Final report, Aug 1945. Dec 1945.  
98p photos, diagrs. Mi \$1.00 Ph \$7.00.
- OSRD 6366 PBL 15863 (I-1252)  
Miller, O. O., and others  
Weldability of commercial armor plates (OD-36-2): Development of ferritic weld metal for repair of thick cast armor. Part I—Investigation of thirteen preliminary experimental weld metals. Progress reports, Sep 1945. Dec 1945.  
35p Mi \$.50 Ph \$3.00.
- OSRD 6367 PBA 27406 (2-630)  
Bartlett, Paul D., and others  
The preparation of some organic compounds for testing as insect repellents. Final report, Oct 31, 1945. Dec 1945.  
110p tables. Mi \$3.00 Ph \$8.00.
- OSRD 6368 PBA 27407 (2-631)  
Heaton, C. D., and others  
The synthesis of some compounds for testing as insect repellents. Progress report to Sep 30, 1945. Dec 1945.  
21p Mi \$1.00 Ph \$2.00.
- OSRD 6369 PBA 27408 (2-632)  
Newman, Melvin S., and others  
The preparation of some compounds for testing as insect repellents. Final report, Oct 31, 1945. Dec 1945.  
90p Mi \$2.00 Ph \$5.00.
- OSRD 6370 PBA 27409 (2-631)  
Drake, Nathan L., and others  
The preparation of some compounds for testing as insect repellents. Final report, Oct 31, 1945. Dec 1945.  
99p Mi \$2.00 Ph \$7.00.
- OSRD 6371 PBA 27410 (2-479)  
Adkins, Homer, and others  
Some compounds submitted for testing as insect repellents. Progress report to Sep 30, 1945.  
58p tables. Mi \$2.00 Ph \$4.00.
- OSRD 6378 PBL 22224 (2-746)  
Standard Oil Development Co.  
Development of flame throwers, service units, and thickened fuels. Summary (final) report. Oct 1945.  
179p diagrs, photos, tables.  
Mi \$4.00 Ph \$12.00.
- OSRD 6379 PBL 58232 (4-885)  
Gulf Research and Development Co., Pittsburgh  
High-angle dirigible bomb project. Final report, July 1, 1942 to Oct 31, 1945. Oct 1945.  
188p tables, drawings, photos.  
Mi \$4.00 Ph \$12.00.
- OSRD 6380 PBL 19782 (2-29)  
Mihalyi, J.  
Short-base rangefinders. Nov 1945.  
70p diagrs, photos. Mi \$1.00 Ph \$5.00.
- OSRD 6382 PBL 20198 (I-1504)  
Snelling, William A., and Snelling, W. O.  
Direct explosion test for welded armor and ship plate: Part II, Prime and welded plate (MS-255). Final report, Sep 1945. Dec 1945.  
41p Mi \$.50 Ph \$3.00.

## Bibliography

- OSRD 6383 PBL 20295 (2-63)  
Handelman, G. H., and Heller, W. R.  
Aerodynamic lead pursuit curves for overhead attacks. Oct 1945.  
82p graphs, charts. MI \$1.00 Ph \$6.00.
- OSRD 6385 PBL 15840 (I-1360)  
Wells, Cyril, and Mehl, R. F.  
Improvement in wrought gun tubes (00-34-3): Final report. Part IV: Relation between transverse reduction of area and performance in six 37 mm. M6 gun tubes. Jun 1945. Dec 1945.  
41p MI \$.50 Ph \$3.00.
- OSRD 6386 PBL 15838 (I-1357)  
Mehl, R. F., and others  
Improvement in wrought gun tubes (00-34-3): Final report. Part VII: Operating characteristics on specification WVXS-88 and specification WVXS-95. Jun 1945. Dec 1945.  
35p graphs, tables. MI \$.50 Ph \$3.00.
- OSRD 6387 PBL 19936 (I-1345)  
DeGarmo, E. Paul, and others  
Cleavage fracture of ship plate as influenced by design and metallurgical factors (M-336): Part I, Hatch corner specimen tests. Final report, Mar 16 to Aug 31, 1945. Dec 1945.  
91p MI \$1.00 Ph \$7.00.
- OSRD 6388 See OSRD 4866.
- OSRD 6389 PBL 16745  
Feild, A. L., and others  
Weldability of heat-resisting alloys (M-102). Final report. Dec 1945.  
56p photos. MI \$1.00 Ph \$4.00.
- OSRD 6390 PBA 27396 (2-632)  
Jenkins, R. L., and Hardy, E. E.  
The preparation of isocyanates, cyanuric acid and decontaminant 40. Progress report to Sep 30, 1945. Dec 1945.  
6p MI \$1.00 Ph \$1.00.
- OSRD 6393 PBL 43036 (3-856)  
Rose, A.  
Development of a television pickup tube greater sensitivity. Final report. Oct 1945.  
27p drawings, photos. MI \$1.00 Ph \$2.00.
- OSRD 6424 PBL 27397 (2-547)  
Coleman, George H.  
Preparation of antimalarial intermediates. Final report, Sep 8, 1944-Sep 8, 1945. Dec 1945.  
28p MI \$1.00 Ph \$2.00.
- OSRD 6427 PBL 16423 (I-1110)  
Freeman, J. W., and Cross, H. C.  
Heat-resisting metals for gas turbine parts (M-102): A metallurgical investigation of a large forged disc of low-carbon M-155 alloy. Progress report, Aug 4, 1945. Aug 1946.  
48p tables, graphs, photos. MI \$.50 Ph \$4.00.
- OSRD 6428 PBL 32210 (2-660)  
Nathan, M. F., and others  
Development of oil thermal generator floating smoke pot, E23. Progress report. Dec 1945.  
58p drawings. MI \$2.00 Ph \$4.00.
- OSRD 6433 PBA 27398 (2-556)  
Kaplan, L., and others  
An investigation of procedures of possible value for the chemical estimation of the toxic principle of red squill. Final report, Sep 30, 1945. Dec 1945.  
50p MI \$1.00 Ph \$4.00.
- OSRD 6442 PBL 6694 (I-591)  
New Mexico University, Department of Physics  
A study of aferics and weather information. 1945.  
45p illus. MI \$.60 Ph \$3.00.
- OSRD 6452 PBL 19934 (I-1345)  
Davis, Harmer E., and others  
Cleavage fracture of ship plate as influenced by design and metallurgical factors (M-336): Part II, Flat plate tests: Final report, Aug 1945. Jan 1946.  
89p photos, tables. MI \$1.00 Ph \$6.00.
- OSRD 6453 PBL 20192 (I-1443)  
Heikis, R. E., and Lucke, C. F.  
Test methods of the Materials Laboratory, Engineering Division, Air Technical Service Command, Wright Field, Dayton, Ohio: Advisory report, Part VIII, Textile, paper, leather, and fungicide test methods of the Textile and Rubber Branch. Jan 1946.  
110p photos, drawings. MI \$1.50 Ph \$8.00.
- OSRD 6457 PBL 20200 (I-1505)  
Wilson, Wilbur M., and others  
Cleavage fracture of ship plate as influenced by size effects (M-336): Final report, Nov 1, 1944 to Aug 31, 1945. Jan 1946.  
98p photos, diagrs, tables, graphs. MI \$1.00 Ph \$7.00.
- OSRD 6463 PBL 32197 (2-803)  
Read, W. T.  
Theory, calibration, and use of diaphragm blast meters. Feb-Dec 1945. Mar 1946.  
60p curves, diagrs, photos. MI \$2.00 Ph \$4.00.
- OSRD 6459 PBL 63639 (5-212)  
Davis, Gordon L.  
Penetration of nitrogen into steel rifle barrels as measured by a tracer method. Jan 1946.  
25p tables, graphs. MI \$1.00 Ph \$2.00.
- OSRD 6513 PBL 63638 (5-788)  
Biberstein, F. A., and others  
Static band pressures in 37 mm. projectiles, II. June 1946.  
110p photos, graphs, tables. MI \$3.00 Ph \$8.00.
- OSRD 6514 PBL 60931 (5-212)  
Biberstein, F. A., and others  
Static band pressure in 75 mm. projectiles. Jun 1946.  
46p graphs, tables. MI \$1.00 Ph \$4.00.
- OSRD 6540 PBL 20194 (I-1325)  
Croxton, F. C., and Lucke, C. F.  
Test methods of the Materials Laboratory, Engineering Division, Air Technical Service Command, Wright Field, Dayton, Ohio: Advisory report, Part IX, Fuel and lubricant test methods of the Chemical Branch, Volumes I-II. Feb 1946.  
217p photos, tables, drawings, diagrs. MI \$2.50 Ph \$15.00.
- OSRD 6541 PBL 20189 (I-1376)  
McSweeney, E. E., and Lucke, C. F.  
Test methods of the Materials Laboratory, Engineering Division Air Technical Service Command, Wright Field, Dayton, Ohio: Advisory report, Part X, Paint and protective coating test methods of the Chemical Branch. Feb 1946.  
51p MI \$1.00 Ph \$4.00.
- OSRD 6542 PBL 20188 (I-1428)  
Bearse, A. E., and Lucke, C. F.  
Test methods of the Materials Laboratory, Engineering Division Air Technical Service Command, Wright Field, Dayton, Ohio: Advisory report, Part XI, Rubber test methods of the Textile and Rubber Branch. Feb 1946.  
71p photos, drawings. MI \$1.00 Ph \$5.00.
- OSRD 6544 PBL 19940 (I-1348)  
Hollister, S. C., and Garcia, J.  
Fatigue tests of ship welds: Final report, Aug 1945. Jan 1946.  
90p MI \$1.00 Ph \$6.00.
- OSRD 6545 PBL 31063 (2-893)  
Pekeris, C. L.  
Theory of propagation of explosive sound in shallow water. Jan 1945.  
195p tables, graphs. MI \$4.00 Ph \$13.00.
- OSRD 6547 PBL 16422 (I-1027)  
Parke, Robert H., and Herzog, Alvin J.  
Heat resisting metals for gas turbine parts (M-102): Chromium-base alloys. Final report, Nov 28, 1945. Jan 1946.  
47p MI \$.50 Ph \$4.00.
- OSRD 6548 PBL 15867 (I-1253)  
Rieppel, P. J., and others  
Development of improved electrode coatings (00-36-2): Part I—Fundamentals of weld-metal porosity. Final report, Jan 15, 1945 to Oct 31, 1945. Jan 1945.  
112p charts, diagrs, photos, tables. MI \$1.50 Ph \$8.00.
- OSRD 6550 PBL 15866 (I-1254)  
Voldrich, C. B., and others  
Development of improved electrode coatings (00-36-2): Part II—Development of alternating-current welding electrodes for high-strength structural use. Final report, May 15, 1945 to Oct 31, 1945. Jan 1946.  
30p MI \$.50 Ph \$2.00.
- OSRD 6551 PBL 19777 (2-14)  
Allison, John L., and others  
Project 13-121, electrical direction finder evaluators. Final report. Oct 1945.  
87p diagrs, graphs, photos. MI \$1.00 Ph \$6.00.
- OSRD 6556 PBL 50867 (4-389)  
U. S. Office of Scientific Research and Development  
Optionic instruments for the study of camouflage. Aug 1946.  
71p diagrs, drawings, graphs, photos. MI \$2.00 Ph \$5.00.
- OSRD 6557 PBA 51028 (4-1036)  
Interchemical Corp. Research Laboratories, New York  
Camouflage finishes and related problems. Sep 1946.  
306p tables, graphs. MI \$7.00 Ph \$21.00.
- OSRD 6663 PBL 16468 (I-1024)  
Cross, Howard C., and Simmons, Ward F.  
Final report on heat-resisting metals for gas turbine parts (M-102). Jan 1946.  
223p tables, graphs, photomicrographs. MI \$2.50 Ph \$15.00.
- OSRD 6504 PBL 16465 (I-1109)  
Edlund, D. L., and Oberle, T. L.  
Heat resisting metals for gas turbine parts (M-102): Experimental alloys for high temperature service. Final report, Dec 26, 1945. Jan 1946.  
60p tables, graphs, photomicrographs. MI \$1.00 Ph \$4.00.

- OSRD 6568 PBL 19791 (I-1408)  
Lukens, Hiram S.  
Flatware for army use (MC-21): Final report Part II, from Jan 25, 1944 to Jan 26, 1945. Jan 1946.  
65p Mi \$1.00 Ph \$5.00.
- OSRD 6572 PBL 20190 (I-1433)  
Reinberg, T. R., and Lucks, C. F.  
Test methods of the Materials Laboratory, Engineering Division, Air Technical Service Command, Wright Field, Dayton, Ohio: Advisory report. Part XII, Title index for Parts I-XI, inclusive, of the report. Feb 1946.  
34p Mi \$.50 Ph \$3.00.
- OSRD 6587 See OSRD 4866.
- OSRD 6588 See OSRD 4866.
- OSRD 6589 See OSRD 4866.
- OSRD 6590 See OSRD 4866.
- OSRD 6592 PBL 18483 (I-1400)  
Chapman, E. C., and Lorentz, R. E., Jr.  
Development of armor welding electrodes (OD-36-2). Final report Part I—Ferritic electrodes for welding of rolled armor plate. Part II—Ferritic electrodes for welding of cast armor. Feb 1946.  
130p Mi \$.50 Ph \$9.00.
- OSRD 6593 PBL 20201 (I-1578)  
Hess, Albert, and others  
Behavior of steel under conditions of multi-axial stress and the effect on this behavior of metallographic structure and chemical composition (MS-307): Tests of small tubular specimens. Final report, Dec 1945. Feb 1946.  
72p curves, photos, tables. Mi \$1.00  
Ph \$5.00.
- OSRD 6595 PBL 19539 (I-1501)  
Hunter, M. A., and others  
Physical and stress corrosion properties of magnesium alloy sheet (NA-147): Final report, Oct 31, 1945. Feb 1946.  
174p tables. Mi \$2.00 Ph \$12.00.
- OSRD 6597 PBL 23776 (2-123)  
Edlund, D. L., and Oberle, T. L.
- 61530
- Development of high strength gun steels (OD-34-3). Final report, Jan 19, 1946. Feb 1946.  
31p diagrs, graphs, tables. Mi \$.50  
Ph \$3.00.
- OSRD 6599 PBL 20187 (I-1413)  
National Research Council. War Metallurgy Committee  
Suggested research topics on magnesium and magnesium alloys: Advisory report. Feb 1946.  
12p Mi \$.50 Ph \$1.00.
- OSRD 6601 PBL 20191 (I-1345)  
DeHaven, J. C.  
Suggested research on aluminum alloys for aircraft, from members of the aircraft industry: Advisory report, Jan 18, 1946. Feb 1946.  
29p Mi \$.50 Ph \$2.00.
- OSRD 6602 PBL 24901 (2-200)  
Cross, Howard C.  
Properties of sheet materials for high-temperature service. Advisory report. Mar 1946.  
34p tables, graphs. Mi \$.50 Ph \$3.00.
- OSRD 6604 PBL 61375 (4-1059)  
U. S. War Metallurgy Committee  
Advisory report on indexing of Division 18 NDRC reports. Mar 1946.  
168p Mi \$4.00 Ph \$12.00.
- OSRD 6621 PBL 21116 (2-132)  
Carswell, T. S., and others  
Development of a plastic incendiary bomb: Final report, Jun 30, 1942. Feb 1946.  
68p photos, drawings, diagrs, tables. Mi \$1.00 Ph \$5.00.
- OSRD 6635 PBL 40628 (3-494)  
Holway, Alfred H., and others  
Factors influencing the magnitude of range-errors in free space and in telescopic vision. Jul 1945.  
333p drawings, graphs, tables. Mi \$7.00  
Ph \$23.00.
- OSRD 6637 PBL 50858 (4-489)  
Stoner, R. G.  
The pressure-distance relation for TNT, determined by measurement of shock velocity. Mar 1946.
- 29p diagr, graph, photos, table. Mi \$1.00  
Ph \$2.00.
- OSRD 6644 PBL 27293 (2-940)  
Rodebush, W. H., and others  
Laboratory study of the possibilities of commercial synthesis of hydrogen peroxide by electrical and photochemical methods. Final report, Oct 31, 1945. Mar 1946.  
134p drawings, graphs, tables. Mi \$3.00  
Ph \$9.00.
- OSRD 6645 PBL 50860 (4-309)  
Lampson, C. W.  
Effects of underground explosions. Final report. Mar 1946.  
84p drawings, graphs, tables. Mi \$2.00  
Ph \$6.00.
- OSRD 6647 PBL 23777 (I-1579)  
Mattason, R. L., and others  
Effect of shot blasting on the mechanical properties of steel (NA-115): Part III. Final report, Oct 1, 1944—Feb 28, 1946. Apr 1946.  
253p charts, diagrs, drawings, graphs.  
Mi \$3.00 Ph \$18.00.
- OSRD 6649 PBL 31953 (2-471)  
Bakelite Corp. Research and Development Dept., Bloomfield, N. J.  
Studies of anti-corrosive and anti-fouling coating systems for ship bottoms. Final report, Nov 15, 1940—Aug 30, 1945. Apr 1946.  
309p photos, graphs, tables. Mi \$7.00  
Ph \$21.00.
- OSRD 6662 PBL 58238 (4-956)  
Beckman, Arnold O.  
Development and manufacture of Pauling oxygen meters. Jun 1945.  
42p photos, diagr. Mi \$1.00 Ph \$3.00.
- OSRD 6668 PBL 50833 (4-485)  
Bray, Charles W.  
Final report and bibliography of the Applied Psychology Panel, NDRC. Jun 1946.  
72p Mi \$2.00 Ph \$5.00.
- OSRD 6671 PBL 48187 (4-769)  
Mallach, Hans, and Newman, Edwin B.  
Acoustic locator for aircraft spotting. Final report. Jun 1946.  
12p photos, drawings. Mi \$1.00 Ph \$1.00.

# CROSS REFERENCE

PB No.	OSRD No.										
944	1857	4447	5535	5242	3762	5577	1094	5912	4546	6022	4211
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18865	3663	19577	4188	20180	4397	20297	1592	21984	5725	22388	4463
18866	4024	19578	3554	20181	4766	20298	1729	21985	5712	22389	4464
18867	4124	19579	6332	20182	5638	20299	4270	21986	5726	22390	4465
18868	3154	19648	5198	20184	6071	20299	4245	21987	5693	22391	5110
18869	1192	19649	5484	20185	6072	20299	1672	21988	5510	22392	5133
18870	1154	19650	4093	20186	1241	20299	5566	21989	5518	22393	5134
18871	3508	19651	4021	20187	6599	20299	6301	21990	5724	22394	5136

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22396	4424	22593	1715	23201	122	24883	1946	27295	1513	27554	5314
22397	4337	22594	1753	23202	178	24884	1615	27296	2087	28519	4504
22465	3053	22595	1782	23203	117	24885	5333	27299	1638	28520	6100
22466	3141	22596	1853	23204	130	24886	5157	27301	1789	28521	6101
22467	3142	22597	1865	23205	164	24887	4762	27302	1340	28522	6016
22468	3164	22598	1942	23206	335	24888	4408A	27303	1372	28523	4502
22470	3542	22599	1963	23207	106	24889	4408	27304	1341	28524	6163
22471	3543	22600	1966	23208	968	24890	1522	27307	369	28525	6160
22472	3758	22601	2004	23215	1006	24891	1030	27308	683	28526	6161
22473	4402	22602	2064	23674	311	24892	1520	27309	5300	28527	6157
22475	4512	22603	3015	23675	415	24893	925	27311	568	28528	5143
22476	4584	22604	3017	23676	501	24895	875	27312	675	28529	6134
22477	5449	22605	3109	23677	10	24896	777	27313	70	28531	1087
22480	1178	22606	3115	23678	1079	24897	788	27331	1393	28532	61
22481	2089	22607	3116	23679	929	24898	590	27332	1325	28533	4736
22501	3407	22608	3125	23680	605	24899	171	27333	2039	28534	4738
22502	3417	22609	3126	23681	611	24900	144	27335	4760	28535	4739
22503	3418	22610	3127	23682	585	24901	6802	27335	5981	28536	4506
22504	3536	22611	3165	23683	577	24903	6054	27337	1934	28537	1786
22505	3538	22612	3181	23684	323	24904	3560	27338	5297	28538	1480
22506	3548	22613	3182	23685	345	24905	3569	27339	5996	28539	1481
22507	3585	22614	3183	23686	320	24906	3796	27340	5298	28540	3413
22508	3586	22615	3236	23687	316	24907	3900	27341	1474	28541	3025
22509	3587	22616	3263	23688	768	24908	5619	27342	3258	28542	3629
22510	3588	22617	3267	23689	758	24909	5623	27344	5295	28543	3722
22511	3625	22618	3268	23690	696	24910	5618	27345	1339	28550	4119
22512	3920	22619	3368	23691	595	24911	5822	27346	1384	28551	3787
22513	3921	22620	4064	23692	873	25382	1559	27347	1585	28552	4080
22514	3922	22621	4234	23693	547	25399	5942	27348	1326	28590	4501
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22524	4073	22852	6179	23712	3038	26993	3775	27395	6086	28600	3135
22525	4089	22853	6310	23713	3464	27133	1751	27398	6390	28601	1416
22526	4090	22854	6311	23724	3121	27143	3237	27397	6424	28602	1417
22527	4113	22860	1260	23725	1839	27144	3230	27398	6433	28603	4444
22528	4125	22861	1264	23726	4800	27145	1519	27399	5978	28604	4519
22529	4126	22862	1312	23727	1879	27146	1659	27400	6334	28605	3990
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30757	5950	31096	138	32212	6344	33341	5643	34756	4997	40537	1494
30758	5952	31097	333	32213	4539	33342	5359	34757	4869	40540	6031
30759	5946	31098	334	32214	4565	33343	3364	34758	4937	40541	6107
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